Who Plans ? A Typology for Late-Twentieth Century Urban and Regional Planners

John Malcolm Udy

A Thesis

in

The Faculty

of

Arts and Science

Presented in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy at
Concordia University
Montréal, Québec, Canada

1985

ABSTRACT

Who Plans ? A Typology for Late-Twentieth Century Urban and Regional Planners

John Malcolm Udy, Ph.D.
Concordia University, 1985

Who plans ? Since Man is a planning animal, in a sense everyone plans. But the little plans we all make do not seem to add up to planning; patently, many drift into decisions, often influenced by society's "Big Planners"---Big Business and Big Government. These modern-day Cyclops, their single eye focussed on self-preservation and self-aggrandisement, are largely blind to the need for major structural and organizational change. Professional planners whose responsibility it is to "link knowledge to action", should be taking a leading role in developing societal guidance systems, but they are in disarray, fragmented, compartmentalized.

An over-all framework is needed as an initial step toward structuring our disjointedness and from there, toward realising our need to build connectedness and coherence. Inspired by a diversity of thinkers, a "Matrix of Mind" has been devised, by juxtaposing the rational and perceptive "modes" of thought and the classic and romantic "styles" of thought. From this, a Matrix of Planners is described, its sixteen categories of planner complete with well-known practitioners and polemicists.

Perceptive-Romantic planners, the profession's Reformers, include the profession's Anarchists, Activists, Advocates and Visionaries. The contrasting

Classic-Perceptives, our Systemizers, who may express their calling as Observers, Empiricists, Theoreticians or Designers. Moving from the perceptive to the rational orbit, one finds Rational-Classicist planners---the profession's Administrators; some serving local government or the higher levels, either as Bureaucrats or Legislators. Alternatively, they may be planning Entrepreneurs. Lastly, Rational-Romantic planners, grouped under the general title of Synthesizers, are either Humanist Strategists, Philosophic Synthesizers, Logical Functionalists, or Transdisciplinary Educators.

Latterly, the importance of gearing the curriculum to recognize all types of planner represented in the Matrix of Planners is stressed. In this way, not only will students gain a clear picture of all modes and styles of planning from which they may choose, they will also acquire a frame of reference which will allow a healthy appreciation of, and an ability to communicate with all who plan.

The importance of subscribing to this approach is that it will help overcome the real danger, that the public, witnessing our internecine battles, will lose confidence in planning as a means to prepare for the future. We must fight against the trend toward innumerable coteries springing up, each disdainful of the rest, and move toward recognizing the importance of accepting the challenge to build understanding and coherence. This thesis is a modest beginning in this direction.

ACKNOWLEDGEMENTS

I wish to acknowledge, with grateful thanks, the long-term support, both moral and material, of Victor Lambert and Alain Nantel, of Lanac/Plan & Assoc., Montreal.

Further, I recognize that but for the generous grant awarded me during each of the last three years by Le Fonds F.C.A.C. pour l'aide et le soutien à la recherche, I should have been hard-pressed to complete this work on a full-time basis.

Finally, I wish to express my appreciation to Mme. Monique Corby, whose peerless professionalism is apparent on every page.

TABLE OF CONTENTS

APPENDICES

DIAGRAMS

CHARTS

ILLUSTRATIONS

1. PROLEGOMENA: PLANNERS LITTLE & BIG

1. PROLEGOMENA: PLANNERS LITTLE & BIG

The Little Planners

Who plans? In the broadest sense of the word[1], everybody plans. It is an innate characteristic, related to Man's ability to think, a feature we consider so significant it is registered in the biological name we have given ourselves. From morning to night, from childhood to the grave, each individual makes his or her own little plans.

It has been argued by some within the planning profession that such individual, small-scale plans aggregate into activity patterns, thus they can be seen as a basic influence on urban and regional form and change. Chapin in particular has long championed the view that the professional planner should survey and analyze these small-scale decisions and actions, as a basis for both small- and large-scale planning, (Chapin, 1965, 1968, 1974).

This supports the benign view that though most people know nothing about formal planning, they do know what they like, and on this basis, in a free society, are able to make their individual plans. But the validity of such a view is dependent on the reasonableness of the assumption that there is a meaningful degree of personal choice in the matter.

---

1. Friedmann and Hudson (1974:2), probably influenced by Mannheim, (see Remmling, 1975:95), adopted the Pragmatist's definition of planning as "an activity centrally concerned with the linkage between knowledge and organized action". Elsewhere (see Conot, 1984:25), Friedmann states the definition less austerely: "Planning . . . is . . . a way of linking scientific and technical knowledge to actions in the public domain". This latter definition is usually assumed in this paper, though on occasion the "public domain" is once removed, as for instance, when the "planning of planning" is discussed.

How true is this? Certainly people would like to believe they can and do plan their own lives, yet casual observation would suggest that we often tend to muddle through, or simply drift until influenced by others into making even the most significant decisions that shape and give direction to our lives. In other words, it is the ethos in which we live that makes the link between knowledge and action for us. Who makes this ethos---these "others" that seem so often to be doing the planning and deciding for us---the "big" planners in our lives?

The Big Planners

Big Business

In our society, the biggest big planner is big business. According to Galbraith, following World War II there has been "a rediscovery of the Benthamite world of the 19th century ", (Galbraith, 1970:xi). Coupled with the Keynesian conviction that nearly all social ills could be cured by more production, (ibid.,xxi), we have become a consuming society. As Stafford Beer has phrased it, "Our unbiblical concern for what we shall eat, and what we shall drink, and what we shall put on is amplified and made obsessional by the pressure to consume---way, way beyond the natural need", (Beer, 1974:1).

How did this come about? Childs and Cater (1954) trace the intellectual changes from the "spiritual despotism" of the Middle Ages, through Calvin and Luther, Adam Smith, Hume, Mill, Cotton Mather, Rousseau, Godwin, and Spencer, to Bastiat and Carey. Arango provides a more prosaic, short-hand explanation for the change of heart in the United States, which parallels changes elsewhere:

> After the Civil War, the industrial revolution took hold of the country. Industry brought with it new principles, most of them the antithesis of the puritanical precepts of the rural pioneer .... Once independent farmers became workmen in factories and offices, always yearning for their lost independence which, in their minds, could be regained only through the acquisition of money .... Efficiency and competition became the gods of industrial free enterprise. Money became synonimous with success. It could be made fast by those who had the drive and the talent, and were ruthless enough.
> (Arango, 1970:61)

The search for efficiency and competitive advantage inevitably led to the formation of larger and larger corporations, such that today, the biggest business is extremely big. Ten years ago, in the United States, according to Galbraith's calculation, (1973:3), the top 2,000 firms contributed around half the total American gross national product.

Whatever the exact figure is now, since the late sixties a great wave of mergers has accelerated the concentration of economic activity in the corporation. Big business has enlarged even more, and with this, has become more detached from local people and their communities. This has had two major effects:

> First, local families and owners ... become appendages of national and multinational conglomerates. A system of financial, economic, and political cues by absentee owners replaces community self-rule .... Second ... a large local corporation may utterly dominate the town simply by flexing its economic and political muscles. As with absentee ownership, democratic self-determinism then becomes more homily than reality. Examples range from state domination ... (Montana; Delaware) to company towns.
> (Green, 1973:43).

Green goes on to document in some detail how the impact on a community, by either an absentee corporation or a local dominant firm, can have

an anti-democratic effect on such factors as civic welfare, political sway, industrial pollution, local taxes, corporate philanthropy, local investment and racial discrimination, such that the local community's ability to plan its future autonomously is considerably diminished.

Notwithstanding that the nature of business is such that it rewards the ruthless and narrowly-motivated,[2] it would be wrong to suggest that all businessmen and women are cast in this mold. Often those within the corporate network are as much victims of the system as are the host communities. Corporate anti-social and anti-community behaviour is, it seems, often the by-product of the "irrational nature of the corporate policy process and not a malevolent decision by an individual or a conspiratorial group", (Hanson, 1977:11).

> Corporate decision-making is . . . slow and complex . . . . (P)ower wielded by top management in any organization with thousands of employees and many constituencies is greatly restricted . . . . The typical large company produces many different types of products . . . . Top management cannot hope to have the expertise to direct and control such diverse businesses. Firms decentralize into product divisions run as semi-autonomous 'businesses' . . . . Standards set up by top management in the parent company are predominantly and often exclusively quantitative, emphasizing return on invested capital and the rates of sales growth . . . . Only at the top of

---

[2] Dabrowski (1972) believes that "the psychopath's (often keen) intelligence operates in the service of his primitive drives without concern for others; he is emotionally cold. . . . Within a competitive society, which values material wealth and power, psychopaths function with relative ease, and frequently attain positions of influence and control. They may even be regarded highly as 'men who are strong, and who know what they want'. Such men perpetuate their values to the detriment of humanity, but this is only occasionally recognized in the aftermath of tragic circumstances". The cases of Peter Demeter, wealthy Toronto developer, and of Colin Thatcher, Saskatchewan politician and millionaire businessman, would appear to exemplify this point. Both were recently convicted of murder, the first of his wife, the second of his former wife.

> the corporate structure can concerns other than numbers be freely integrated with economic considerations.
> (Hanson, ibid.)

But at this level, the executive agenda has become badly overloaded. With preponderant concern for monetary gains and competitive advantage, it is inevitable that social and community interests usually receive low priority. The level of action is low as a consequence of the low level of knowledge. The lower echelons also suffer from the turgidity of the corporate system, as illustrated by this verse, written by the economist, Kenneth Boulding:

> In every giant corporation
> Are channels of communication
> Along which lines, from foot to crown,
> Ideas flow up and vetoes down.
> (Boulding, 1970:81).

Beyond this, recent managerial history has seen the rise of the ultra-cautious manager. "This tendency reflects the ruthlessness with which the executive promotional system weeds out . . . [those] who fail or even stumble in small ways". In these circumstances, "sociopolitical action and the use of qualitative considerations in decision making definitely are high risk strategies", (Hanson, ibid.).

Yet it would be wrong to neglect the fact that despite this formidable list of impediments, business has occasionally taken active interest in community affairs. It was Chicago's Commercial Club which in 1906 hired Daniel Burnham to devise a plan for the city. In 1943, the Allegheny conference on Community Development was formed to reshape Pittsburg's "Golden Triangle". Since the Second World War, similar groups have influenced the development of Philadelphia, Baltimore, San Francisco, Wilmington, Syracuse, and Hartford, (ASPO, 1975). In Canada, the renaissance of downtown areas of cities from Halifax to Vancouver can largely be attributed to business enterprise.

The problem here is to distinguish the degree to which business is motivated by public-spiritedness or pure self-interest. Schemes such as the newly-devised Philadelphia Mortgage Plan, "a redirection of conventional mortgage policies geared to giving old neighborhoods new life", (Odyniec, 1977), seem to justify faith in it sometimes being the former. Zeckendorf's vision and extraordinary entrepreneurial abilities, coupled with a willingness to take serious risks,[3] were instrumental in sparking the creation of a truly vital core for the Montreal metropolitan region in the early sixties, (Dean, 1981:53). Beyond the prosaic horizon of most professional planners and laymen alike, this was planning through entrepreneurial enlightened self-interest at its best.

But what of businessmen; specifically, the average land investors and developers who appear to heavily influence governments in their own favour, often at the expense of other sectors of the public? According to some investigators, here is a particular group of big businessmen with a direct, and sometimes malevolent effect on the lives of those living in metropolitan areas, especially in or around the core areas.

Lorimer, a leading Canadian critic and investigator of these hidden relationships, expressed the beliefs of a new generation of muckrakers at a recent conference of urban experts:

---

3 In the case of Montreal's Place Ville Marie, the risk did not pay off for Zeckendorf. Construction commenced on CIL House and the Canadian Imperial Bank of Commerce building at about the same time as Place Ville Marie, putting over 3 million square feet of prime office space on a real estate market which was averaging only 300,000 square feet of new office space annually, (Dean, 1981:53).

> City governments in Canada are strongly and directly tied to the property investment and land development industry, with the strongest link being the arrangement which puts a hard core of small-time property industry people like contractors, real estate agents, architects, developers and real estate lawyers onto city councils. These politicians with property industry connections form the centre of a majority or voting bloc which implements policies protecting and promoting the interests of the developers, property investors and other industry members. That these conflict with the interests of specific groups and communities and often the public in general is ignored. (Lorimer and Ross, 1976:98).

One might argue that the type of investigation these critics make tends to be one-sided, with a crusading rhetoric which reduces its impact on those who are not already convinced;[4] nevertheless, the new muckrakers offer at least circumstantial evidence of fellow-travelling, if not outright collusion between certain business interests and government on a number of occasions[5]--which brings us to the other "big planner" of the human environment--big government.

Big Government

Planned control or direction of business and social affairs through government intervention is far from new. Harrington (1976:270) traces it back at least to Bismarck in Germany, and Napoléon III in France. (Certainly the re-planning of Paris by Haussmann under the aegis of that Emperor of France was a

---

4 For instance, they never record the numerous times developers are delayed, frustrated and thwarted by government. They tend, in other words, to follow the dubious practice of looking for proof for preconceived notions. This has led someone to dub their reports "interface journalism", representing a new form of "urban theology", (Kusner, 1977). Less committed researchers may not corroborate their findings (see: Markusen and Scheffman, 1977).

5 For a particularly flagrant example, see Deachman and Woolfrey, 1982.

massive governmental intervention, which although it gave Paris the grand qualities we delight in today, represents a degree of "urban renewal" that spelt considerable hardship for the Parisians of the time).

Only civil servants, it seems, approve of big government, but nowhere is it more of an anathema than in the United States, where active distaste for governmental intervention stretches back to the Boston Tea Party and the founding of the nation. This disapproval of big government is given formal expression in Lincoln's precept, that "government should do for the people only what the people cannot do for themselves".

Some, recognizing the merits of this principle, would argue that few would wish on themselves the strictures of a paternalistic, much less, those of an authoritarian, government, because of their evident incursions into individual liberty. Others, heeding Popper's "paradox of sovereignty" argument,[6] would demur. These arguments aside, of ultimate importance is the interpretation of "what the people cannot do" that needs to be done for them by government.

Until the economic crisis of 1929, the interpretation was so narrowly construed that most nations were blind to the opposite danger, of too little governmental intervention. By the sin of omission, licence was granted to the few, in the false name of liberty, to exploit both the environment and other people mercilessly.

---

[6] Popper's "paradox of sovereignty" argument is that the wise would choose the good to rule, who in turn would give the task to the majority. However the people, rather than face the angst of eternal vigilance and continual choice associated with true democracy, would prefer to hand over the reigns to a strong man, (see Magee, 1974:82). This paradox was by way of explaining why, during the inter-war period, Germany, Italy, Russia and Japan chose tyrannies rather than democracies; while the other argument adheres to the precepts of liberalism.

With the coming of the Great Depression, with sometimes 25 per cent of the labour force unemployed, it was finally evident that a re-interpretation was necessary. Roosevelt was elected with a clear mandate to give the people a "New Deal", which could only be achieved by greatly increasing government intervention, (Heffner, 1952:252-262). Thus growth of big government began, even in the Land of Lincoln.

Pearl Harbor, and America's entry into the Second World War, followed quickly on the heels of the New Deal. Fought simultaneously over the Pacific, in Africa, and in Europe, it called for a highly complex deployment of men, machinery and merchandise, that involved half the gross national product of every participant country. The success of government intervention in this regard is grudgingly admitted, even by those who actively oppose big government, (Alexander, 1977:149).

After World War II, the "Welfare State" became a feature of society throughout the industrial west, (see Harrington, 1976:302). Not mentioned by Harrington, but particularly germane to our interests, is the development in the post-war period, of the social service of physical planning, particularly outside North America, (see e.g. Bryant, 1972; Strong, 1971; Whittick, 1974, passim; Eldredge, 1975), but also on this side of the Atlantic as well, (see e.g. Clawson and Hall, 1973; Armstrong, 1974; Mayer, 1974).

All this has meant a considerable increase in the size and presence of government operations, to the great discomfiture not only of socialist thinkers such as Harrington (ibid.), but also conservatives, such as Hazlitt, (1969), and Alexander (1977). The following quotation from the latter, documents their sense of alarm:

> Beginning in the sixties, the number of federal agencies and programs exploded into the hundreds. Most were created to deal with narrow issues. Few were coordinated . . . many were cross-oriented and ill-conceived, and the outcomes have often been mutually conflicting or contrary to what was intended . . . . [G]overnment accounts for about one fifth of the gross national product and manipulates the cost of credit . . . . [B]usiness . . . has come to perceive government as a newly dominant non-market network, squatting at the center of the market network---touchy as a mousetrap, unpredictable as the San Andreas Fault---jerking away at the strings connected to all participants. The signals of the market tend to get swamped in all the commotion. (Alexander, 1977:149).

Although there are notable exceptions,[7] the above excerpt records the dismay and sense of foreboding felt by the greater number of business executives, and no doubt is one of the factors that underlies the "swing to the right" represented by the election and re-election of Ronald Reagan to the presidency in the United States, the Californian moratorium on government spending, the conservative critique of the "liberal experiment" that they feel led to the near bankruptcy of New York City, (see Morris, 1980), and the land-slide election of a Conservative government in Canada in 1984.

Critique of the Big Planners

The business world is not alone in its critique of big government. Stafford Beer, whose opinion is based on experience as management consultant to several international agencies, and no less than eight national governments,[8] uses an

---

7 For example, Bradshaw, who as oil executive and member of President Carter's campaign task force on energy, showed himself able to see beyond the vision of the usual businessman stereotype.

8 The UN, UNESCO, OECD, NATO, and the governments of Britain, Canada, Chile, Denmark, France, Italy, Sweden, and the United States of America.

analogy very similar to Alexander's "jerking away at the strings", to describe the conditions in big government that have led to their seeking his advice. However, he finds the analogy equally valid for big business, (Beer, 1974:14-16)

According to Beer, today's technology and techniques could provide the means to cope with these crises, and enhance equality, life and liberty in society. His "Liberty Machine"---computer, telecommunications and cybernetics, creatively linked---could, he believes, overcome the lack of institutional resilience, and increase the well-being of the individual, (ibid.,35-52). Unfortunately, to this time, electronics and systemic thinking are being used in some form of "Licence Machine". In the business field, Beer uses the evocative term of "Electronic Mafia" to describe the subversive use of market research by big business to program mass "wants", and thereby, to control the "little plans".

Similarly, government administration, misunderstanding the function of the computer to "attenuate variety", (i.e. to condense information), uses it to amplify and proliferate. "Inordinate demands for information are made on the public, which receives much less <u>useful</u> information than before. Quill pen administration continues, although the systems are computerized. The management is inundated with indigestible data", (ibid.,33), (original emphasis).

All this is in the vain hope of perpetuating dangerously moribund institutional arrangements. In this regard, our "big planners" take on the characteristics of live but insensate creatures, responding to the natural laws of self-preservation, self-perpetuation and self-aggrandisement. Like the legendary Cyclops, sheer size gives these institutions tremendous power, but tunnel vision makes them careless of ordinary mortals. Laurens Van der Post's analysis of these mythological giants seems all too appropriate:

> The key to the significance of the one-eyed giants who stride so strangely through Greek and Roman mythology [is] . . . that their gruesome presence there does not mean that a race of one-eye colossi once walked the earth with seven-leagued strides and brushed the thunder clouds out of their hair. In the aboriginal language of the spirit, in the underlying thought processes of man it is a different and meaningful story, and the giant is the image of a man who has grossly exceeded himself in a part of himself. Only one eye is planted in the cretin head to indicate that he has not the two-way vision that the complete spirit needs but only this one-way look into a world of outward-bound senses. So also the two eyes of contemporary man when they focus <u>as one</u> on the outer physical world give him only a one-way sight and admit only one-way traffic.
> (quoted by Leshan, 1974:60), (original emphasis).

2. RECAPITULATION & REFOCUSSING

2. RECAPITULATION & REFOCUSSING:

We have reviewed the three groups that come immediately to mind in answer to our leading question. We see, in essence, that action in a democratic, neo-capitalist mass society such as ours, is based primarily on the narrow objectives of the market-place. Government acts as a control agent to protect the public from the worst excesses, as well as being an active participant in the development process itself. A myriad of government programs and projects are aimed to provide what the public cannot undertake as individuals, or either will not or should not undertake as entrepreneurs. Such government interventions take the form of services and facilities in such fields as transportation, health, education, and recreation. In general, individuals find their needs catered to by this system, but in particular cases some may find life circumscribed, and in other cases, proscribed by it. Notwithstanding, it can be stated, as we began, that everyone plans to some degree, and in some way; thus our initial response, though trivial, is correct.

To go beyond this simple truism, one must refocus, to see beneath the institutional surface. Here, we note that the complexities of a mass society have called forth a mass of specialists to serve every functional need. The planning function being no exception, a more precise answer to the question, "who plans ?", would be that it is the planning specialist, or simply "the planner" who plans. But who is this planner ?

There is no simple, straightforward answer. For example, the late Charles Abrams, in his glossary, The Language of Cities, devotes five pages to

list and describe twenty different types of professional who answer to the name of "planner"; nor does he believe the list is final, (Abrams, 1971: 228-232).[1]

In the same glossary, Abrams describes planning, (i.e. what planners do), in terms somewhat narrower, but in greater detail than our definition, as:

> The guidance and shaping of the development, growth, arrangement and change of urban environments with the aim of harmonizing them with the social, aesthetic, cultural, political, and economic requirements of life . . . . Democratic city planning should respect the rights of individuals and their communities as these are consistent with the general welfare of the city, the region, the nation . . .
> (Abrams, ibid., 48)

From this, our initial review, it would appear that planning, as presently practised, falls far short of this ideal. Part of the blame for this must be attributed to the shortcomings of the institutional system; simply, the price one must pay for emphasizing such values as liberty, diversity and equal opportunity, which often predisposes our version of democracy to be inefficient and not strictly fair. However, this does not absolve the planning profession from linking knowledge to action as effectively as possible.

Given the diffuse nature of the planning profession at this time, with many different kinds of planner endeavouring almost independently to make the necessary links between knowledge and action, the responsibility is a hard one to

---

[1] This writer agrees that Abrams' list is not final. Abrams distinguishes between types of planner by using the following adjectives: generalist, architect, housing, transportation, regional, underdeveloped area, sociologist, educational, public health, lawyer, engineer, economic, administrative, zoning, rural, research, real-estate, advocacy, landscape, and geographer. The order is idiosyncratic as is his choice of "type". Abrams is actually often describing the various fields of planning practice, rather than distinctive types of planner, per se. Thus the list is exemplary rather than definitive, but nevertheless it is indicative of the diffuse nature of the profession at this time.

fulfill. Yet the lacune created by the quasi-independence of types of planner goes virtually unnoticed. It is symptomatic that Abrams, despite a long and distinguished career as practitioner, critic and teacher in the field, sees no necessity to go beyond a mere listing of planners, to make the point that either hostility or indifference is often more evident than recognition of interdependence between the types of planner. But there are extenuating circumstances: historical contingencies which have blinded the profession to the necessity to recognize and to deal with this problem. The first is the comparative immaturity of planning as a profession in its own right. Assuming the formation of professional associations as indicative of the establishment of separate fields of endeavour, this did not occur in the planning field until the second decade of this century. Sixty years of recognition may hardly be enough for a profession to fully realize its potential, especially when, as in the case of planning, its roots are so diverse.

A whole range of disciplines with extremely different approaches and concerns have contributed to planning theory and practice. Founded as an offshoot of the design professions, (architecture, landscape architecture, engineering), to which geographers, economists and lawyers early lent their expertise, it has since borrowed heavily from the social sciences, both in terms of method and stance. Latterly, it has been leaning on the new fields of environmentalism and the computer, management and policy sciences. Such a diversity of disciplines is bound to breed poor communication and lack of comprehension and in consequence, misconstruction, or simply disinterest and distrust. These negative tendencies, rather than being ameliorated, tend to have been perpetuated in the way planners have been educated.

Although individual planning courses might appear in university curricula as early as before World War I (Wilson, 1983:89), there were no university programs specifically for planners prior to World War II, thus those that practised planning between the wars did so with, or at best, despite, the bias of their original discipline. When planning schools were finally formed, they were usually no more than adjuncts of the departments of one of the founding disciplines.[2] This has led to fundamental disagreements as to what subjects should be included in the planning curriculum and at what level and in what balance. Though lip-service is paid to interdisciplinarity, it is often no more than that. In actuality, to quote Abrams, "(planning) education has become so specialized . . . that the teacher tends to stay within his own limited horizon. Yet only those familiar with (all) the relevant disciplines are equipped to know that they do not know as well as to identify priorities, accord the proper emphasis to issues, and render more balanced judgements", (ibid., 233).

The above problems were compounded by a tremendous growth in the number of practitioners over a very short length of time. Prior to World War II, there may have been a few hundred professionals who called themselves planners, scattered in a number of countries all over the world; today, any sizeable industrialized nation can alone boast several thousand. Thus, the pressure to produce plans and planners quickly, to serve a world characterized by

---

[2] This was not invariably so. In 1945, the University of Durham was the first of several English universities to establish a school of "Town and Country Planning". This five year program was consciously not biased in the direction of any particular discipline, and conscientiously interdisciplinary and trans-disciplinary. That this writer is a product of this school rather than of more conventional planning education, has no doubt contributed to the views expressed here.

economic and social turbulence, a threatened ecology, and an energy crisis run rampant, has further obscured the need for an objective reassessment of who the planner is.

A Series of Seeming Paradoxes

We are faced with a series of seeming paradoxes. On first view, planning seems to have come of age in our time. Never before have so many planners made so many plans affecting the lives of so many people. But on reflection, we are liable to see the point of Chesterton's oxymoron, for it really does seem that "nothing fails like success".

Once the prerogative of pope or potentate, planning is now "for people", but progress has led to complexity. The old-style master-builder has had to give way to the specialist. Specialization has in turn led to factionalism, each sub-group seeing itself as the only authentic planner. (Others, if recognized at all, are thought to occupy a subordinate position, or may even be seen as subversive). With each faction believing in its pre-Copernican centrality, it is a foregone conclusion that the results will not combine to create a comprehensive, coherent link between knowledge and action.

If each planning coterie persists in its self-centredness, one might then argue that we are near the beginning of the end of planning; a prelude to its being rejected as society's means of coping with the future.[3] But again, another paradox: could it not be that the current chaos signifies the end of the

---

[3] Perhaps it will be merely a return to its pre-World War II status, described by Friedmann and Hudson, (1974:11), thus: "City planning, though widely accepted, was tolerated as a relatively harmless activity which just possibly might do some good".

beginning ? What appears as chaos may actually be a new order awaiting discovery. In other words, current conditions may herald, not disintegration, but a new integration at a higher, more complex level[4]; the first signs of a structure, or typology of planning specialties that can lead planners away from internecine animosities toward mutual respect; from minimum contact toward maximum cooperation. As Thompson (1971:121) expresses it, "Inverse entropy, the conservation of value . . . comes from a . . . transformation in which a disadvantage on one level of order becomes an advantage on a higher level of order. Every creation is preceded by the right kind of chaos needed for a universe", (Thompson, 1971:121), (original emphasis). Thus, though no more than incipient at this time, one can foresee the development of a much more overt and structural interrelationship between planners, more appropriate to the tasks of the late twentieth century than are the individualistic and inherently antagonistic specialisms we have inherited.

---

[4] Such an interpretation parallels the psychiatrist, Dabrowski's maverick concept of "positive disintegration". Dabrowski sees such problems as "inner conflicts, maladjustment to environmental circumstance", not as maladaptive and abnormal, but as "indications of psychic loosening and fragmentation, which are ultimately beneficial to mental growth". According to Dabrowski, they "express the operation of dynamisms which break down and refine simple psychic structures and functions, and progressively transform them into the integrated, multi level structures which characterize the authentic personality", (see Dabrowski, 1972).

3. RESEARCH AIM AND METHOD

3. RESEARCH AIM & METHOD

This present study is undertaken in the belief that such a structure will not emerge from the chaos of present practice without some effort to define it objectively. In this regard there is at least one precedent. In the mid-sixties, the sociologist, Leonard Reissmann, devoted a considerable part of his discussion of The Urban Process to describing what he saw to be the four major types of planning specialist: the practitioner, the empiricist, the visionary and the theorist, (Reissmann, 1964:21-149). These he arranged in a typology, (see Chart 1), on the basis of the kind of data used, and the type of problem each dealt with, (ibid. 26).

CHART I: AN INITIAL TYPOLOGY OF URBAN SPECIALISTS

after Reissmann, 1964:26

	TYPE OF PROBLEM TO BE DEALT WITH	
TYPE OF DATA USED	APPLIED/ PRACTICAL	THEORETICAL
QUANTITATIVE	PRACTITIONER	EMPIRICIST
QUALITATIVE	VISIONARY	THEORIST

Despite its obvious shortcomings[1], this would seem to be a useful beginning, but it is no more than that. Reissmann admitted the list was not all-inclusive. If this was so at the time he was writing, it is even more so today. With changes during the intervening years, the list would have to be further extended if it were to embrace all who now claim to be planners, as witness San Jose's cover for a Journal of the American Institute of Planners, in 1974. (see over).

In answering the question, who plans, it seems more than of academic interest that this list be as all-inclusive as possible. Diversity of opinion and functional approach within the profession is nothing but healthy if each faction can be seen to belong to a whole of which it is an integral part. Without this sense of the whole, however, each faction will continue in the mistaken belief of its exclusiveness, to the detriment of the profession and of the society it serves. A suitably broad format is called for which will embrace planners of all persuasions.

A Two Stage Analysis

To assure completeness, the development of this format calls for a two-stage analysis. The approach taken moves a step beyond the thought that "conceptions of planning and its mechanisms (including planners)... are reflective of the society in which planning occurs", (Etzioni, 1973), to postulate that in our society, planners are so varied a group as to represent, if not the

---

[1] Reissmann is surely stretching a point to classify visionaries as dealing with applied or practical problems.

Illustration 1. Planning Types According to San Jose

Source: Cover of Journal of American Institue of Planners, (1974), 40:3 (May)

entire spectrum of human temperament and intellectual endeavour, at least a very broad range of intellectual orientation.

Assuming this to be so, the construction of a frame of reference representing all shades of modes and styles of (extravert[2]) mental attitude that underly an extensive range of human activities would seem a prerequisite for the development of a suitably broad typology of planners. To construct a convincing "Matrix of Planners", one must begin by elucidating a "Matrix of Mind", that for our culture is more or less comprehensive.

The latter may be approached by way of two quite different observations of social processes: one is Hoffer's (1980) examination of the process of social revolution; the other is Thompson's (1971) analysis of the social dynamics of a primitive hunting party and the extrapolation of these dynamics to illustrate their relationship to cultural history in general. Correlations between these two paradigms will then be sought by reference to the differing functions of the hemispheres of the brain and lastly, by reference to certain Jungian concepts, namely, the hero archetype(s) and the theory of psychological types, as modified by this writer, and as applied to the important schools of psychology of today.

---

2 The introverted types are discounted here, since as Jung says, "[f]or our present-day culture the extraverted attitude to the problem of human relationships is the principle that counts: naturally the introverted principle occurs too, but it is still the exception and has to appeal to the tolerance of the age", (Jung, 1976:373)

4. STAGE ONE: PARADIGMS FOR A MATRIX OF MIND

4. STAGE ONE: PARADIGMS FOR A MATRIX OF MIND

The Pattern of Revolution

Hoffer developed in The True Believer, (1980), a plausible thesis that, beginning with the foundation of the Christian era, major social change has come about most frequently[1] through mass movements. There is nothing particularly spectacular in this observation, but of importance is a corollary: Hoffer's recognition of a common pattern in these revolutionary changes. Whether religious, social, or nationalistic, whether from the left or from the right, all seem to follow a similar evolution. This is not to deny their individual idiosyncrasies, nor that some of these movements have been beneficial to society at large, while others have been patently retrogressive. Nor does it suggest that once underway, the revolution may not abort at some point prior to its complete accomplishment. (We will postulate here that in fact Hoffer's analysis misses a crucial final stage, no doubt because it goes beyond Hoffer's concern. We will get to this matter in due course).

Hoffer indicates three major stages or phases in the pattern of change brought about by mass movements. Each is dominated by a different element in society, and each is led by men or women of strikingly contrasting temperaments. The first phase is brought into being by the "Men of Words".

---

[1] The development of mass support is not the only way to successful social change, as witness the recent Ethiopian revolution, in which, bit by bit, the protagonists quietly relieved Haile Selassie of his powers, while always appearing to act in his name, (see Kapuscinski, 1984:105-164).

Such are most typically restless, free-thinking members of the intelligentsia. They are in a position both to become aware of a need for change, and to react to that perception. Impassioned and articulate, they are both motivated and intellectually equipped to formulate their minority manifestos. Amongst these are those who, by patience, or a good sense of timing, are able to inspire a previously inert and apathetic public. Overnight, it seems, outlandish demands and crazy idealism begin to appear not only attractive, but realistic and attainable.

The success of the movement inspired by the "Man of Words" is made manifest by the dedication of the early converts to the cause---the "True Believers". For them, the cause has given meaning to a formerly aimless life. Afraid to lose the clarity of its message, True Believers cling tenaciously to the dogma, as they plot the revolution. "More Catholic than the Pope", these fanatics will endeavour to eliminate the "Man of Words" if he appears to soften the initial invective, or to suddenly preach moderation. As Nisbet expressed it, long after Hoffer's initial intuitive insight:

> Whether from the right or left, zealots, as we have learned from a good many studies in political psychology, have much more in common than abstract creed alone could suggest. The zealot, whether in service of God, Stalin, or Hitler, will show up as pretty much the same personality type, convinced that his redemptive mission on earth justifies any and all transgressions of what is conventionally regarded as morality. (Glasgow; 1973:51).

After the revolution, differences buried in the interest of the cause, inevitably surface; factionalism breaks out amidst the ruins of the old order. Outright anarchy may reign until a new order is established in a third phase, by a strong, coldly calculating and often personally ambitious authoritarian. Having seized power, he restores normal routines in Draconian fashion. Careful

to preserve the rhetoric of the revolution, its substance and spirit is sacrificed in the interests of law and order---and the centralization of decision under the authoritarian's absolute rule.

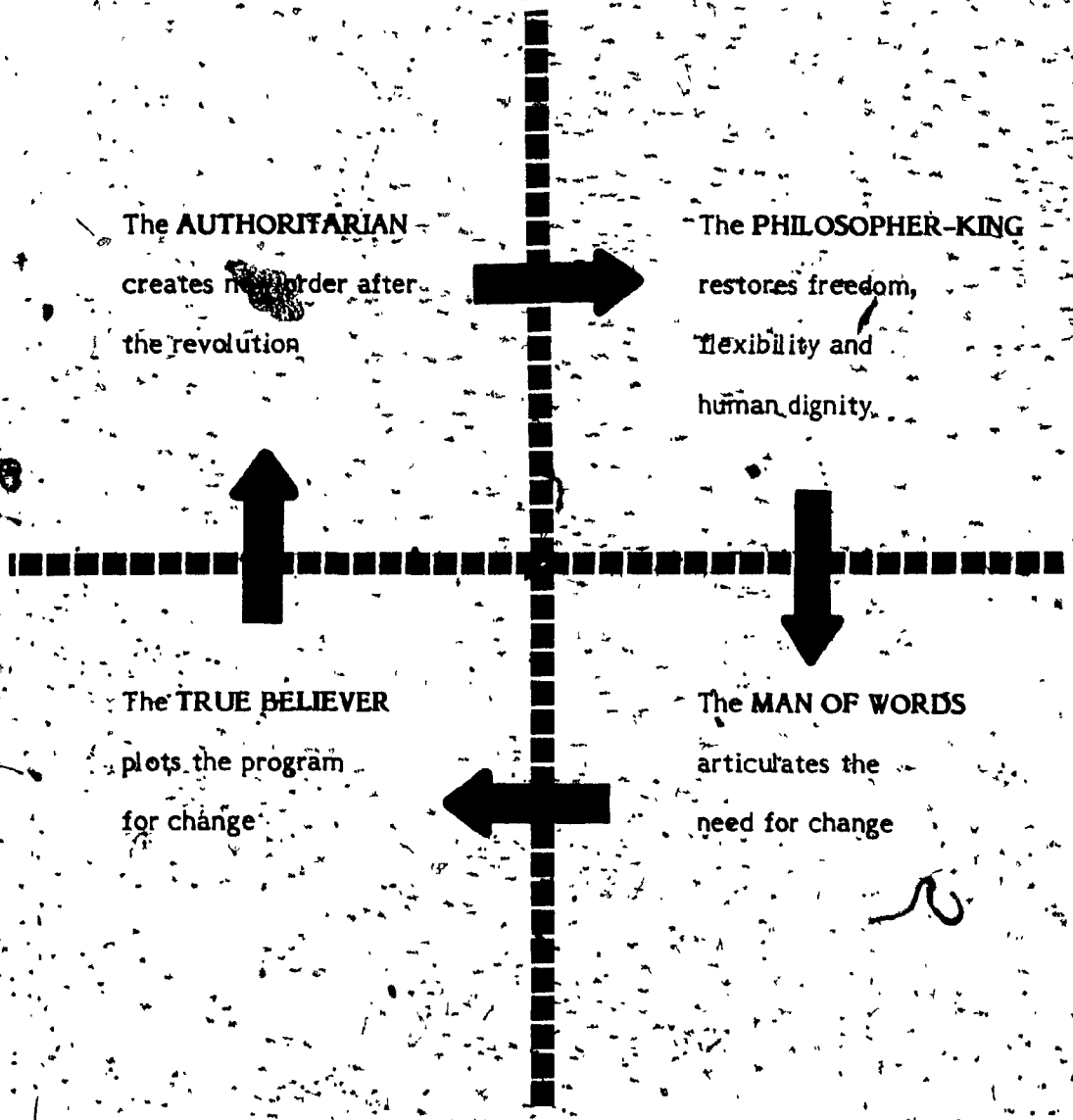
Hoffer deals with the extreme case, and it being beyond the scope of his thesis, he omits a fourth phase which, ideally at least, should follow: the gradual return of freedom, flexibility, tolerance and human dignity. Marx himself suggested the need for this phase in his concept of "praxis":

> Praxis combines head and hand (thought/action), transcending goals and methods. Over-fascination with vanguard parties and seizures of power often leads to its dichotomy from creation of a new society. According to Marx, this is profoundly wrong, for it perpetuates bondage, albeit in a new form. Revolution is not merely or even primarily, a matter of eliminating our oppressors, the evil bourgeoisie, afterwhich the millenium .... Revolution, praxis (transformation) and human emancipation are one.
> (Le Baron, 1974:30).

Although this fourth and final stage might be brought about by group action, for convenience it may be called the age of Plato's "Philosopher-King", reflecting the triumph of benign rationality. However, no matter how benign and reasonable, either the internal shortcomings of the new regime, or external forces to change will spawn new critics, some of whom may begin a new cycle of revolution, (if rapid or violent), or of social evolution, if accomplished at a more humane pace. Diagram 1 illustrates the major relationships between these four phases.

Diagram 1. The Pattern of Revolution

(after Hoffer, 1980)



Headman and Hunter, Shaman and Clown

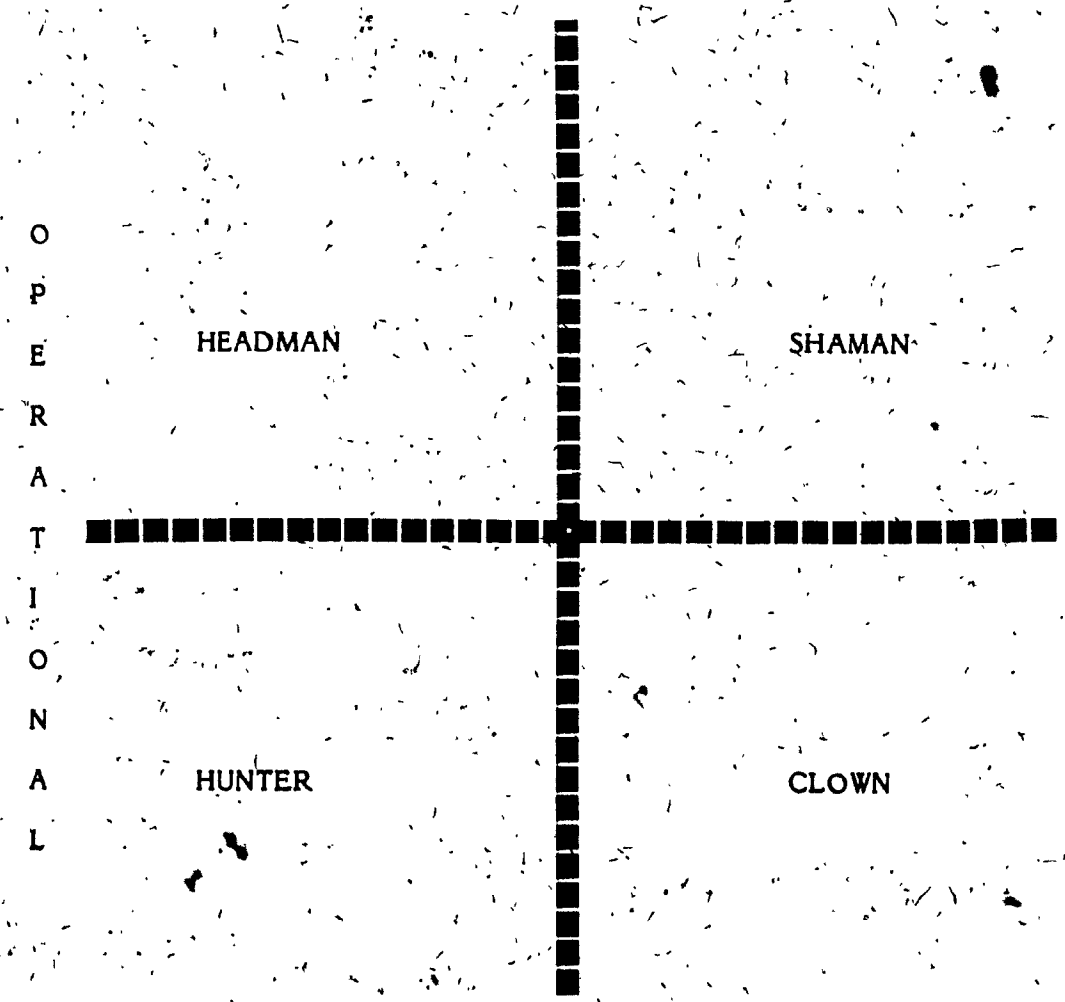
Another evocative image is supplied by the cultural historian, William Irwin Thompson, (1971:74-107). Basing himself on a film about a tribal hunting party, he indicates how the functions of the four members of the primitive hunting team: the tribe's headman, chief hunter, shaman and clown, can be viewed as prototypical of those of first the agricultural, and latterly the industrial society's principal institutions, (ibid., 77-78). Thus the Hunter becomes first institutionalized as the military, and latterly as the industrial sector. The Headman transmogrifies into the state, which in turn becomes government. The Shaman becomes, in an agricultural society, institutionalized religion, which in a secular industrial society, becomes education, (see also Cox, 1966:192; Ingalls, 1976). Finally the Clown becomes "art" in an agricultural society, which devolves in our day into the media, (Thompson, ibid.,76). Diagram 2 follows quite closely Thompson's own illustration of the interrelationships of these four, (ibid, 77).

The Complementarity of Traits

As with Hoffer's contrasting phases of the revolution, and the idiosyncrasies that dominate each of them, Thompson recognizes certain prevailing traits in each member of the hunting team. The Headman and the Hunter, (along with their various personae in more advanced societies), are the operational members of the team. The Hunter explores the terrain, looking for, and interpreting the physical evidence of the whereabouts and condition of the

Diagram 2. The Four Members of the Hunting Team

(after Thompson, 1971).



animal they are tracking. The Headman leads and routinizes the phases of the hunt.

In contrast, as the "charismatic" members of the team, the other two supply the ideational aspects of the operation. The Shaman links the hunt to cosmic signs and events; meanwhile the Clown, as official maverick, pokes fun at the pomposities and posturings of the others. Ostensibly without power or overt function, he subtly influences through jest, innuendo, and seemingly pointless questioning.

The Outlines of a Typological Structure

There are differences in time-scale between the two scenarios, the hunt being measured in days, while social revolution may take years between its inception and its culmination. This accounts for apparent differences in relationship between the actors. Subject to the shorter time frame and the imperatives of the success of their venture, the hunters are seen to cooperate, while in the processual nature of the latter, one leader supersedes another.[2] This distinction aside, there is an interesting parallel in the traits and temperaments of the individuals described.

The Clown is like "The Man of Words" in being a maverick---an articulate, charismatic "outsider". In his various guises, the Hunter is functionally the same as the "True Believer", for in their respective scenarios, it is they who accomplish the task in hand in a down-to-earth fashion. The Headman and the

---

[2] Put into the same time-frame as the hunt, i.e. the point at which the old order is toppled, the revolutionary factions are likely to be as cooperative as the hunters.

Authoritarian are obvious parallels, and it needs no stretch of the imagination to see the functional link between the roles of Shaman and Philosopher-King.

Thus one sees in the combination of these two scenarios, an incipient theory that could lead to the formulation of the "Matrix of Mind". But based on this evidence alone, the structure seems tenuous. Further investigation is in order if a convincing argument is to be developed.

Right and Left Brain Hemisphere Traits

Based initially on nineteenth century studies made on brain-damaged subjects, research published during the last dozen years[3] has indicated that the hemispheres of the neo-cortex of the brain are relatively specialized. The findings have been summarized by Luthe relative to humans as follows:

> The left hemisphere . . . is relatively specialized in work with words, in sequential, linear modes of operation, analytic-logical thinking, recall of verbal material, calculating, classifying, reading, writing, naming, explaining, describing, and seems to provide intellectual forms of insight. Complementary functions of a primarily nonverbal nature are carried out by the right hemisphere . . . . The neural mechanisms in this . . . half of the brain control . . . [amongst others things] work with spatial forms, visuo-spatial relations, spatial syntheses, analogues, music, melodies, rythm. It is synthesis-oriented, processes information more diffusely, and operates in a holistic . . . global and relational manner.
> (Luthe, 1976:6), (original emphasis).

The contrasts Luthe describes can most easily be grasped in tabular form. Here, in that form is Hampden-Turner's analysis:

---

3. For summaries of this research, see Gazzaniga, (1972), and Luthe, (1976).

CHART 2: Neuro-Functional Differences between Hemispheres of the Human Neo-Cortex

(after Hampden-Turner, 1981:87)

LEFT HEMISPHERE	RIGHT HEMISPHERE
- verbal	- non-verbal
- analytic	- holistic
- reductive-into-parts	- synthetic
- sequential/rational	- visuo-spatial/intuitive
- time-oriented	- timeless
- discontinuous	- diffuse

In a monumental study of sixty conceptions of the mind, encompassing religious myth, and ancient and modern philosophical and psychological concepts, Hampden-Turner recognized twenty-four dichotomies which he matches with left and right-hemisphere functions, (Hampden-Turner, 1981:89). From these, seven have been chosen as being relevant to the present context, to which six other sources have been added. Although not exhaustive, this provides a fair coverage of the contrasting traits of the hemispheres of the neo-cortex.

Notes regarding these thirteen examples are to be found in Appendix A, while they are here summarized in Chart 3. This more than adequately explains a two-way split, but what of the four-way breakdown apparent in the typology we see incipient in the Hoffer and Thompson paradigms ?

A hint to the effect that the neocortical dichotomy cannot explain all is to be found in the fact that there is also a two-way breakdown in the palaeo-

Chart 3: Selected References to Left & Right Hemisphere Traits

Authority(ies)	Field	Left Hemisphere	Right Hemisphere	Source(s)
Buber	Philosophy	I - It	I - Thou	1/2
Kuhn/Popper	History/Philosophy of Science	Normal Science	Paradigm Change	1/3/4
Getzels/Jackson/ Hudson	Psychology	Convergent Thinking	Divergent Thinking	1
de Bono	Psychology	Vertical Thinking	Lateral Thinking	1
Deikman	Psychology	Action mode	Reception mode	5
Jaynes	Psychology	Ancient Man	Voice of the Gods	1/5
Bakan	Psychology	Protestantism	Catholicism	1
Einstein	Science	Words	Thought	7
Nash/Nietzsche	Cultural History	Apollonian	Dionysian	8/9
McLuhan	Cultural History	Roman alphabet	Ideograph	10
Conant	Cultural History	Empirical/Inductive	Theoretical/Deductive	11
Blackburn	Cultural History	Techno-culture	Counter-culture	12
Varela/Alexander	Cybernetics/Urban Design	The Tree	The Net / Semi-Lattice	1/13

NOTE: For brief explanations of each of these bifurcations, see Appendix A

Sources:

1. Hampden-Turner, (1981)
2. Buber, (1958;1970)
3. Kuhn, (1970)
4. Popper, (1969; 1972)
5. Deikman, (1972)
6. Jaynes, (1977)
7. Ghiselin, (1960:43)
8. Nash, (1972)
9. Nietzsche, (1967)
10. McLuhan, (1977)
11. Conant, (1965)
12. Blackburn, (1972)
13. Alexander, (1965)

encephalon. This "older brain" is actually composed of two "brains", one inherited from the lower mammals, the other from our reptilian ancestors. These older brains not only control the visceral functions of the body, but in some way not as yet entirely clear to researchers, appear to also perform roles which, though essentially unconscious, have considerable bearing on the total performance of the mind, (Smith, 1974:19).

Throughout history, the generation of deep-rooted emotional responses have tended to be associated not with the mind, but with various parts of the body. Some cultures believe the seat of the emotions to be the heart, (hence Pascal's "the heart has its reasons of which reason knows not"). Others locate it in the liver, the breast, the bowels, the blood or the nerves. Interestingly, modern research has shown all these functions to be controlled in some way by the primitive brains, (Hampden-Turner, ibid.,82). Is it therefore so surprising that "[f]amous psychoanalysts . . . insist that deep within us is a quite different, dumb, dark yet powerful mind, binding us to some ancestral superego, and which, full of resistances, fastens tenaciously on symbols which express its feelings", (ibid.).

Of course, such complex entities as "feelings" are not exclusively the purview of the palaeoencephalon. This becomes especially clear when we realize that the human brain, as we now know it, did not evolve as did the hand from the claw; instead these brains seem to have been successively superimposed one upon the other, resulting in duplications and overlaps, (ibid.,80). Nevertheless, it seems reasonable to suggest that the seat of feelings is in the voiceless, older part. Similarly, sensing, in itself, does not seem to be a preoccupation of the higher brain.

Not enough is known to postulate with any certainty a physiological basis for a quadrifid[4] breakdown, but there is at least enough innuendo to be dissatisfied with a simple, dualistic breakdown, and to encourage the exploration of a source that has made a particularly vital contribution to this area of socio-scientific speculation, namely, Jungian psychology.

Jungian Hero Archetypes

A Jungian interpretation of the myths of ancient Greece and Rome, of the Middle Ages, the Far East, and of contemporary tribes, (Henderson, 1964), provides corroborative insight, for the Hoffer and Thompson paradigms read much like the "collective unconscious" sagas of hero archetypes common to all these times and places. The thread that links the hero myths involves either the evolution of the individual hero, from brash youth to maturity, or alternatively, four separate hero archetypes, each akin to one of the individual hero's major evolutionary stages.[5]

Using Radin's Hero Cycles of the Winnebago as diagrammatic of the four heroes or hero stages (depending on the culture), Henderson sketches out the characteristics: first there is the hero as Trickster; instinctual, uninhibited, and childish in his behaviour. Next the hero as transformer, or Founder of the culture. The third archetypal hero is an ambiguous Man-God, who with

---

4 For arguments as to why four and no other number, see von Franz, (Franz, Hillman, 1979:2), Thompson, (1972:109), Jung, (1962:103n; 1976:542), and Jacobi, (1951:30).

5 The stages of the individual hero myths are akin to the revolutionary stages; the four separate heroes, to the four members of the tribal hunting team.

superhuman powers or aids; defeats all opposition with guile or with strength. Finally, there are the Hero-Twins who, united in the womb, essentially constitute the dual aspect of a single archetype.

The Hero-Twins remind one of Thompson's allusion to human society being "a many-body situation in which values can only be achieved in conflict with opposites", for one twin is acquiescent, mild, and reflective, while the other is action-oriented, the dynamic and rebellious accomplisher of great deeds.[6] Together, they represent the perfect combination, but they are prone to one fatal flaw: hybris---manifested as either over-confidence, lack of humility, or self-indulgence. Depending on the culture, this is variously resolved, by betrayal, defeat, ritual sacrifice, or voluntary renunciation of power; in other words the restoration in some way, of some form of equilibrium, or alternatively, the beginning of a new cycle, (Henderson, 1964:110-114). Diagram 3 shows the four hero archetypes in an order that reflects the similarity of the cycle to that of Hoffer's revolutionaries and Thompson's tribal hunting team.

Jung's Compass of the Psyche

The argument is reinforced once again by reference to yet another Jungian insight, this time, from Jung himself.[7] Based on a personal need to

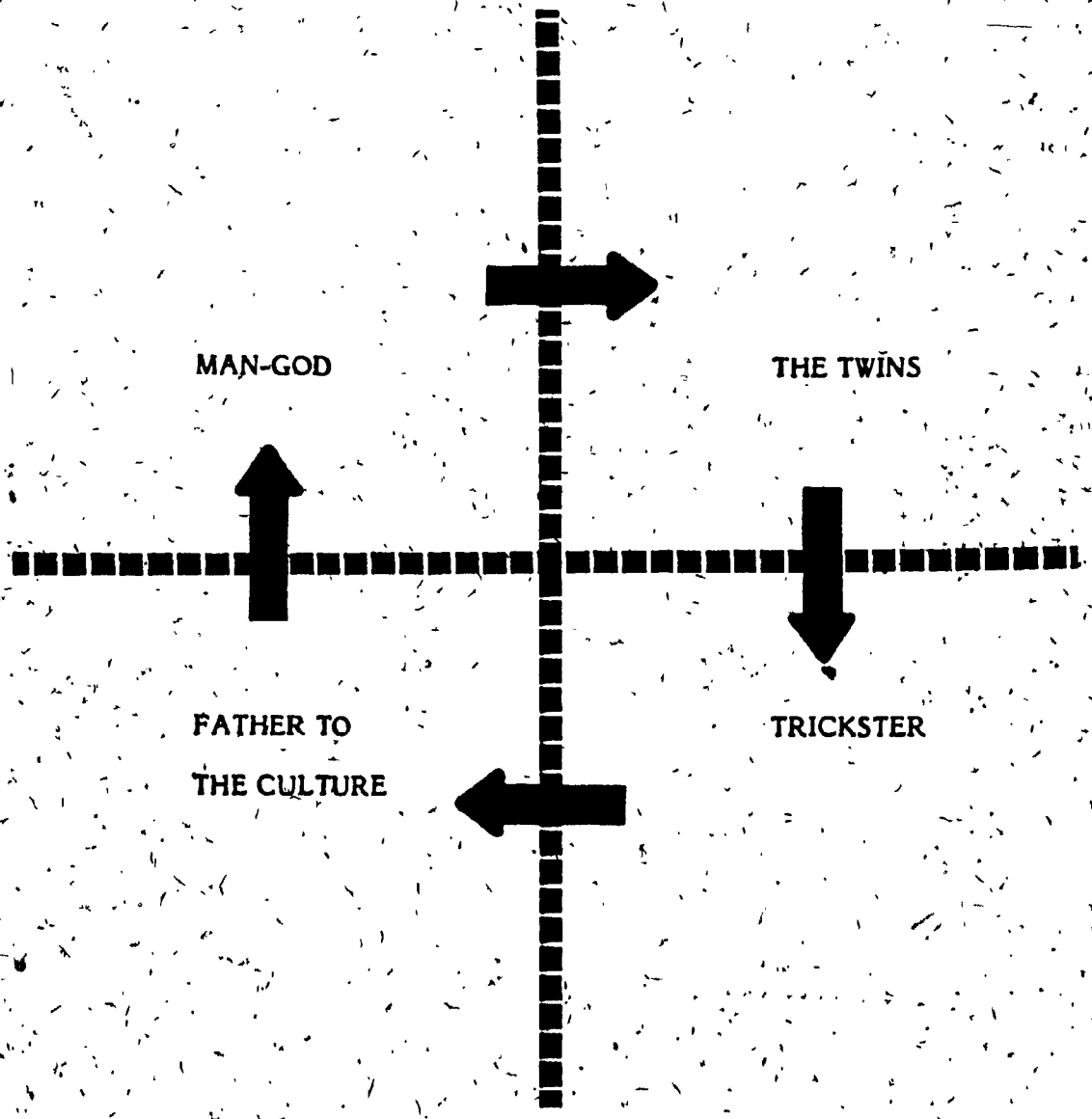
---

[6] They also bear a strong family resemblance to Deikman's "action mode" and "reflection mode", (Deikman, 1972).

[7] The source referred to here is Jung's final exposition of the idea, (Jung, 1964), completed just before his death. It is preferred in this context because it is clear, concise and unambiguous. For a critical and comparative analysis of the original text in its latest English version, (Jung, 1976), see this author's analysis in Appendix B.

Diagram 3: The Hero Cycle or the Cycle of Heroes

(after Henderson, 1964)



define the ways in which his outlook differed from that of Freud and Adler, Jung came across the idea of there being four primordial types of psychological orientation to the world, to people and things:

> I had always been impressed by the fact that there are a surprising number of individuals who never use their minds if they can avoid it, and an equal number who do use their minds, but in an amazingly stupid way. I was also surprised to find many intelligent and wide-awake people who lived (as far as I could make out) as if they had never learned to use their sense organs . . . There were others who . . . seemed devoid of all imagination, and they entirely and exclusively depended upon their sense-perception.
> (Jung, 1964:60,61).

From such observations, Jung was led to formulate what he latterly referred to as "The Compass of the Psyche". People oriented themselves primarily by one of four ways: by either thinking, feeling, sensation or by intuition. People who thought applied their mental faculties to adapt to circumstances. Less obviously logical were the [sic] "equally rational" individuals who do not think as such, but found their way by feeling. In the sense that Jung gives to this word, feeling is akin to evaluation: a judgement of value, (ibid., 61). In popular usage, feeling and intuition appear almost synonymous, but Jung draws a definite distinction. Feeling, (as he sees it), is like thinking, a rational, ordering function. In contrast, he maintains, an intuition is an irrational, perceiving action.[6]

---

[6] This author believes that Jung was in error in his definition of feeling and intuition, as respectively rational and [sic] irrational, and in this regard, the terms should be reversed. Although intuition, by its nature, is never a consciously rational process, the unconscious mind seems often to form the basis for conscious, rational thinking. "Feeling", on the other hand, has all the hallmarks of irrational behaviour. This argument, elaborated in Appendix B, is fully endorsed by the Jungian analyst, Roger Woolger, (see Appendix C). Therefore the validity of this argument is assumed in this text.

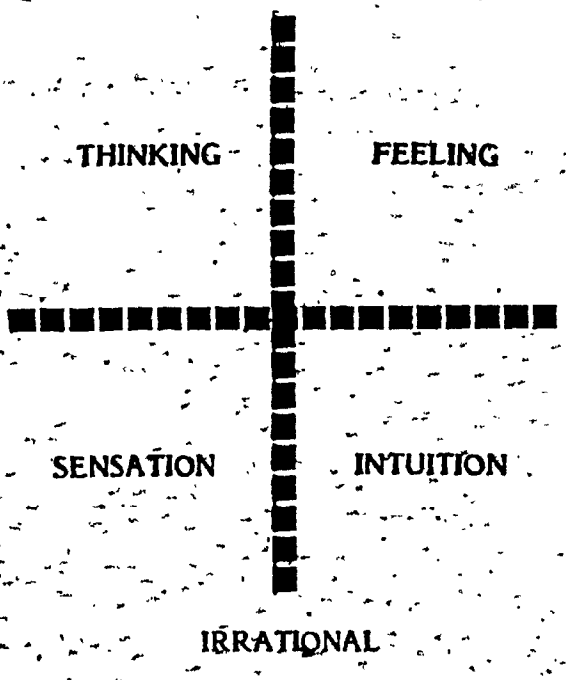
Sensation, i.e. sense perception, is to Jung, also irrational, since it is dependent primarily on external stimuli and not on internal mental exertion. Granted the reversal of Jung's positioning of intuition and feeling, as shown in Diagram 4, the points of Jung's "Compass" seem to fit well enough the matrix format as previously developed.

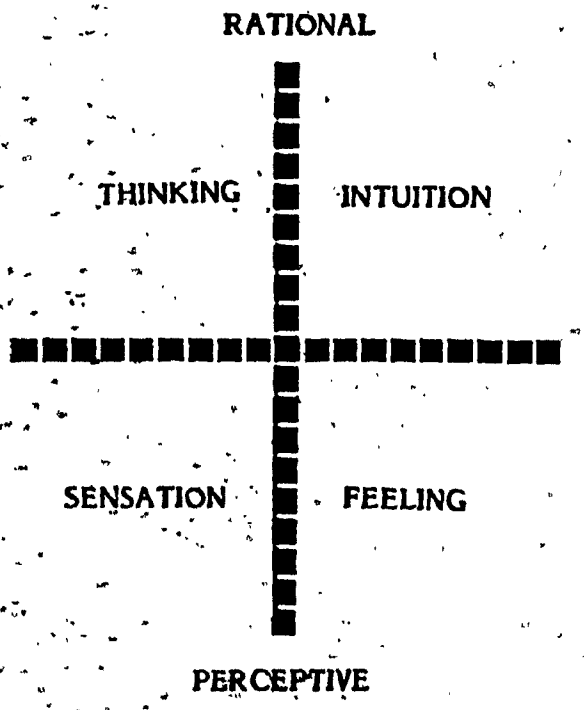
Psychological Schools Psychologically Typed

One last insight from Jungians---an application by Roger Woolger of Jung's theory of psychological types to psychologists themselves, (see Diag.5). Woolger's diagram is particularly apposite here, since it attempts to perform for psychologists, what Stage II of this analysis will endeavour to do for planners. While here we will be using the soon to be elaborated "Matrix of Mind" to codify sixteen types of planner as opposed to Woolger's four types of psychologist, his summation of what each type values and what they neglect provides a succinct assessment of both the positive and the negative attributes of the major psychological types. However, it should be recognized that psychologists and planners, though technically the same types, may well stress different aspects of that type. Diagram 6 is an attempt to adapt Woolger's technique and presentation directly to planners.

Diagram 4: The Compass of the Psyche (two versions)

A As proposed by Jung, (1964:60,61).





B As modified by this author (see Appendix B).

DIAGRAM 5: PSYCHOLOGICAL TYPING OF PSYCHOLOGICAL SCHOOLS
as devised by Roger Woolger (undated)

RATIONAL

THINKER (left hemis.)	INTUITIVE (right hemis.)
Value: Analysis, goals, structure, order, logic, objectivity, theory, will, control, sequential thinking. (Verbal dexterity) Neglect: Sentiment, flow, comfort, catharsis, melodrama, expressiveness, spontaneity.	Value: Synthesis, pattern, imagination, holism, speculation, eclecticism, aesthetics, creativity, lateral thinking (mental dexterity) Neglect: Concrete reality, here-and-now, empiricism, "hard facts", mathematics
SENSER ("limbic")	FEELER ("heart")
Value: Concrete reality, here-and-now, hard facts, data, control of nature, empiricism, (mathematical and physical dexterity) Neglect: Ideas, fantasy, aesthetics, imagination.	Value: Expression, flow catharsis, feeling, caring, spontaneity, sharing, nature, warmth. Neglect: Structure, logic, analysis, theory, objectivity, control.

CLASSIC

ROMANTIC

PERCEPTIVE

DIAGRAM 6: PLANNERS AND "THE FOUR SOLITUDES"

Source: Udy, John M., (1984), Jung and Healthy? An Exploration of the relationship between Jung's "Compass of the Psyche" and the Planning Profession, presented at the Annual Conference of the American Planning Association, Minneapolis, Minnesota, 8 May, 1984, (mimeo.), Chart VI, p. 10

Note: The terms "limbic" and "heart" are used symbolically only.

5. THE MATRIX OF MIND : A SYNTHESIS

5. THE MATRIX OF MIND: A SYNTHESIS

One can now see clearly emerging, a "Matrix of Mind" with four dimensions[1], yielding four major inclinations in the way Man thinks and acts. These are reflected in the Hoffer and Thompson paradigms, in the Hero archetypes and the "Psychic Compass", among several other reflections here reviewed. Jung recognizes one axis as being between rationality and "irrationality" (i.e. "perception"). Hints as to the other axis are to be found in the dozen descriptions of the opposing dichotomies contained in Appendix A and on Chart 3, and in Thompsons's distinction between operational and ideational functions.

It remains, therefore, to clarify the terms and to apply the Matrix to the field of planning. But before this, it bears mentioning that one is dealing with relative tendencies here, and not absolutes. In the words of Henri Bergson, "the species cannot be defined by exclusive characteristics, but only by the tendency to emphasize them". All brains possess both right and left hemispheres; in carrying out even the most menial mental tasks, one continually switches from inductive to deductive thinking, and there are few who are totally rational without a grain of perception, or visa versa. As Jung expressed it, "An individual . . . can only more or less be categorized", (Jung, 1964:58), (original emphasis).

---

[1] For arguments as to why four and not any other number, see sources cited, p.37n.

But categorization is surely in order. The superiority of the human brain lies in its capacity to classify events and objects on the basis of broad, significant criteria. Although it is true that not even two molecules are exactly the same, as an argument against general classification, this can quickly be reduced to absurdity. One does not abolish laws because each instance of criminality is a little different, nor is the milling of flour abandoned because it precludes the individual treatment of each grain of wheat.

The Coordinates

With these thoughts in mind, we may now turn our attention to describing the co-ordinates of the Matrix of Mind; the vertical axis of which has been called here, "modes" of thought, while the horizontal has been named, "styles" of thought.

The Modes of Thought Axis

The term, "modes of thought" has been borrowed from the title of Conant's book, Two Modes of Thought, referred to in Chart 3. In describing the "Compass of the Psyche", two mental processes[2] Jung saw as "rational" while two others he termed "irrational". "Rational" seems satisfactory as a description of one pole of the Modes of Thought axis, however, "irrational" seems less appropriate, since it says more about what is being described is not, rather than what it is. It would do no injury to the Jungian concept, and be far better for the purpose in hand to substitute for the other pole of the Modes of Thought axis, the term "perceptive".

---

[2] In this context, we need not concern ourselves with disagreements as to which two.

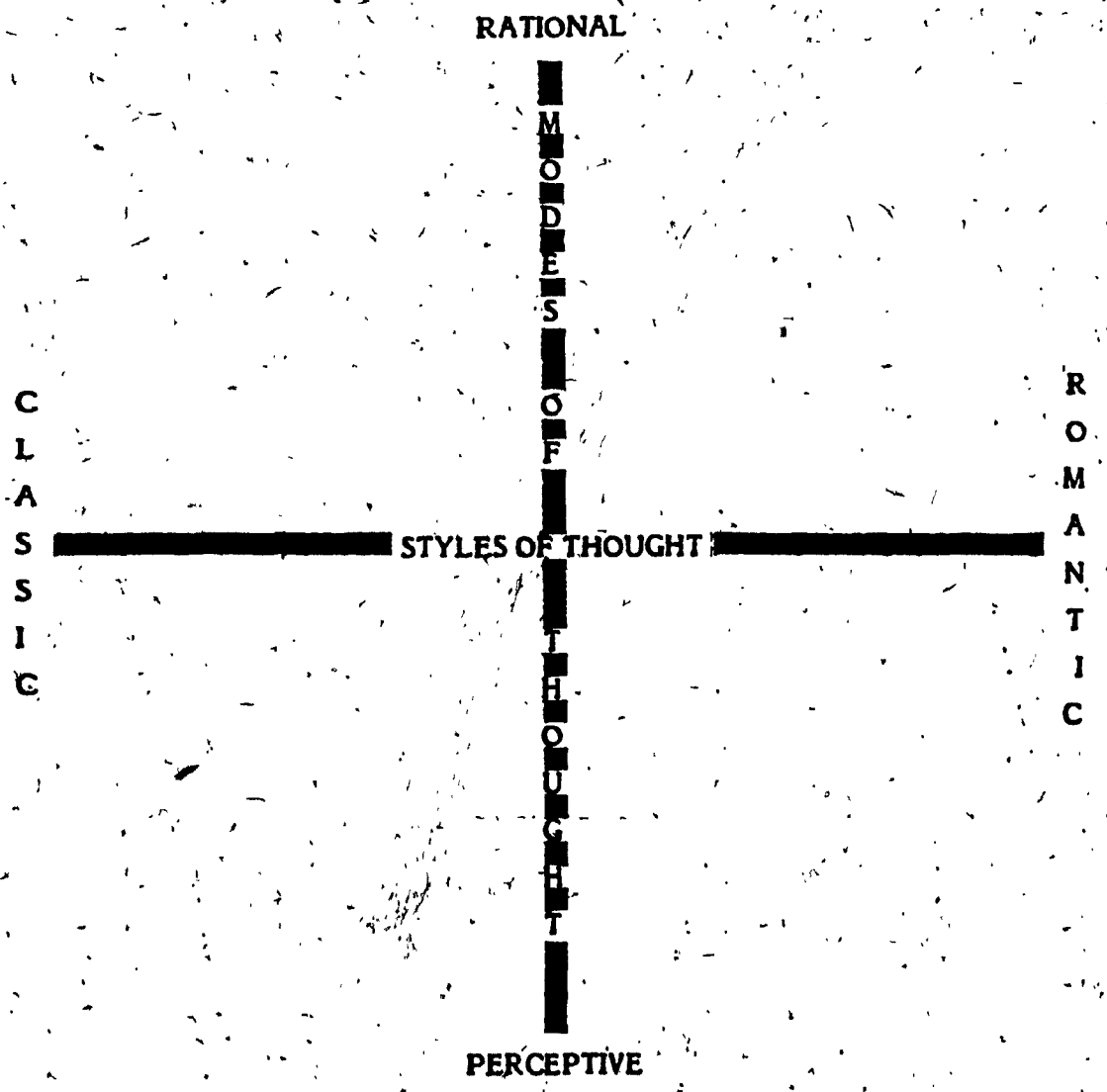
As can be gleaned from examining their various personae, the rational thinkers put their faith in reason and logic. Their preference is toward the deductive approach, or the development of general theories for particular applications, or simply, the application of general rules to particular situations. In contrast, perceptive thinkers either base themselves on the evidence of their senses, or on "gut feelings" as their source of inspiration. They rely more on the inductive approach, thinking more subjectively in terms of personal knowledge and experience than their rational counterparts. They may gather information on an empirical basis, or may simply rely on how they feel about the situation in hand. That these feelings do not always have a rational basis in no way perturbs them.

The Styles of Thought Axis

In our interpretation of Jung's "Compass of the Psyche", (see Appendix B), it has been noted that rational people use their minds either to think or intuit, while perceptive people seem to abandon rationality to perceive the world through their sense impressions or through their feelings. However, as has already been implied, there are commonalities between rational thinkers and perceptive sensers, and rational intuitives and perceptive feelers.

It would seem reasonably clear that both those who thoughtfully rationalize and those who codify sense impressions are at heart Apollonians, dominated by left hemisphere thought processes; in contrast, those who rely on feeling to evaluate things, join with those who react intuitively, as society's "right hemisphere" Dionysians.

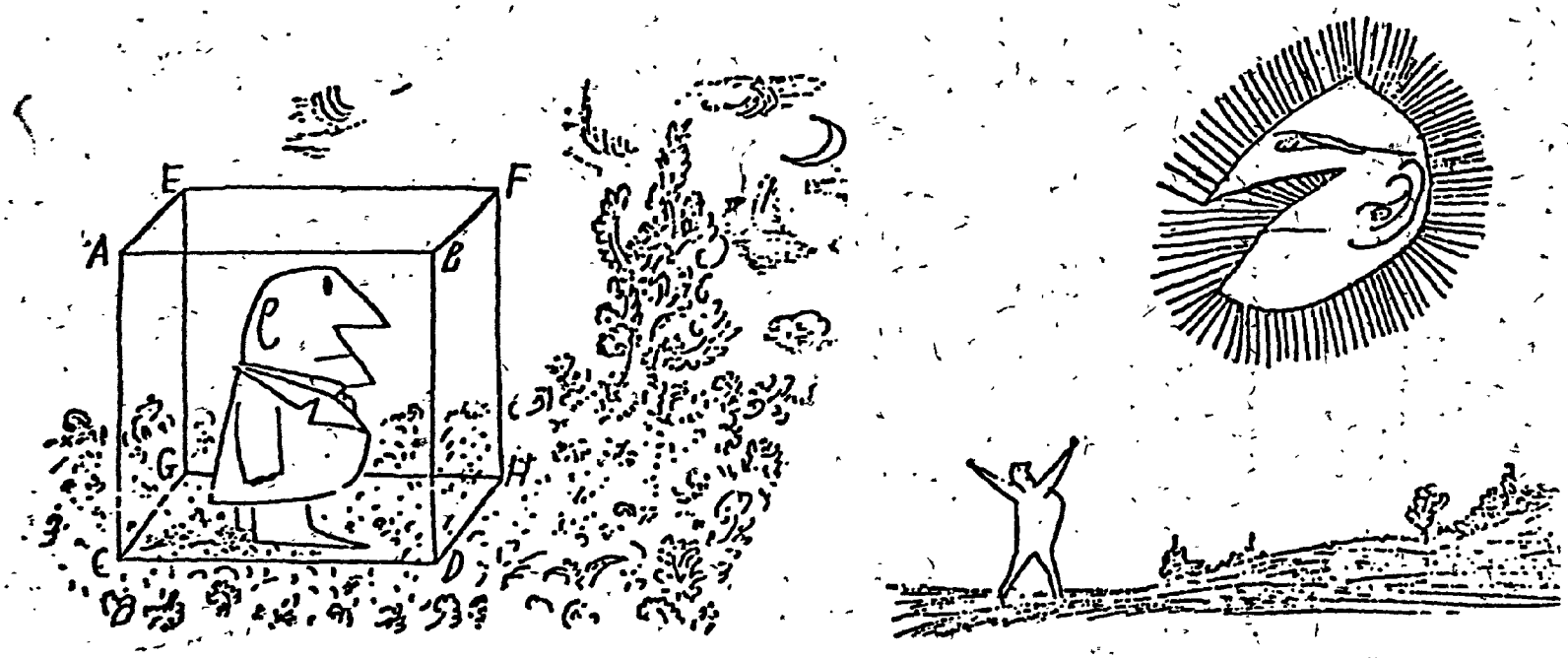
Diagram 7 : The Matrix of Mind, Showing Axes and Coordinates



However evocative might be the contrasts between the ancient rival spiritual approaches of Apollo and Dionysus, or those of the working of the hemispheres of the brain, they are too specific to be ideal terminology for the "Styles of Thought" axis of the Matrix of Mind. The terms "Classic" and "Romantic" come to mind as more appropriate, (see Illus. 2). Recently used by Pirsig, (1975:242,243), in his search for the definition of "Quality", they have long been associated with descriptions of contrasting styles, in architecture, painting, the dance, literature and other art forms. It is therefore fitting that these terms be used here, to represent the polar extremes of stylistic tendencies. However, the terms, "Operational" and "Ideational", used by Thompson, (1971:109), are respectively very evocative of the roles of the left hemisphere, action-oriented, Sensers and Thinkers, and the more reflective, right hemisphere Intuitives and Feelers. Thus, this should be kept in mind when we use the chosen terms.

Illus. 2: Steinberg Comments on Classic & Romantic Approaches

Source: "Steinberg on the City", Journal of the A.I.P., Aug., 1961.



6. THE PARADIGMS AND THE MATRIX OF MIND

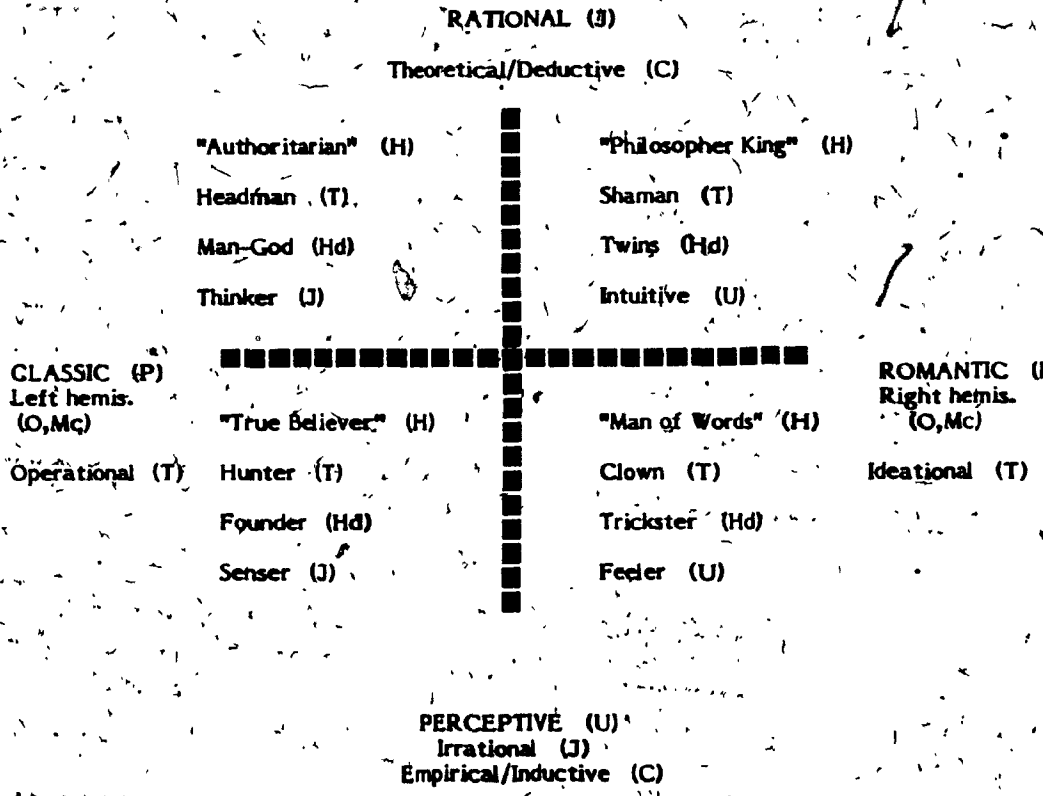
6. THE PARADIGMS AND THE MATRIX OF MIND

The point has been reached where the paradigms under discussion can be summarized diagrammatically on the Matrix, (see Diagram 8). The consistency of the image seems striking; ignoring obvious differences intrinsic to each of the quadrifid systems, related to their raison d'être or their context, the individual systems not only support, but seem to amplify each other. Thus the whole is greater than its parts. The final advantage of the Matrix of Mind over any of its component elements, is that the axes have been recognized and named. Thus, in addressing ourselves to the question that prompted this study, "Who plans?", one has the benefits of multiple analogy without its disbenefits or limitations.

To elaborate on this point, the Matrix of Mind articulates a basic truth common to, and in a form that recognizes the insights of all studies that have here been juxtaposed. The form makes these insights applicable to other situations, of which the question in hand is an example. The Matrix seems to imply a number of things of which the following immediately come to mind.

The mind of Man, the central exchange for information about the self and its environment, and the seat of human action and delectation, has two major modes and two major styles of operation. Depending on the mental make-up of the individual, and by extension, the prevailing stance of a culture, a society or an era, one combination of mode and style may be emphasized over another. This explains both differences between individuals and cultures, as well as cyclical changes within a given culture over time.

DIAGRAM 8: The Matrix of the Mind, with selected stereotypes & Archetypes distributed



SOURCES:
C: Conant (1965)
H: Hoffer (1980)
Hd: Henderson (1964)
J: Jung (1964)
Mc: McLuhan (1977)
O: Ornstein (1974)
P: Pirsig (1975)
T: Thompson (1971)
U: Jung, (1964;1976), as modified by Udy.

The point to reckon with is that the mental make-up of the individual, and the stance of an age or a culture tend to be imperious, obscuring the fact that to be fully human, all four functions must be recognized and readily operative in a balanced fashion. Even though there may be severe limitations as to the degree to which individuals may modify their mental predilections, and make conscious their inferior functions, (Franz & Hillman, 1979:17), on a social as well as an individual basis, there is "the necessity to be responsible for one's own inferior functions and their development", (Wheelwright, et al., 1964:8).

In sum, differentiation is a sign of advancement only if differences are interelated and exploited. When certain functions are neglected, there is the danger of creating a one-dimensional consciousness, an unimaginative, uncreative "minimal adjustment to the savage glory of the human condition". It is the danger of this condition now nascent in the field of professional planning, that has prompted this study. As McLuhan has pointed out in another context, "the ultimate conflict . . . is upon us. Since understanding stops action . . . we can moderate the fierceness of this conflict by understanding", (McLuhan, 1964:30). Without knowledge or recognition of the intrinsic nature of circumstances, one becomes their victim. Only with knowledge and recognition comes the ability to control.

Like Hampden-Turner's Maps of the Mind, this is "a plea for the revision of social science . . . to stress connectedness, coherence, relationship, organicism and wholeness, as against the fragmenting, reductive and compartmentalizing forces of the prevailing orthodoxies", (Hampden-Turner, 1981:8).

7. FURTHER DIFFERENTIATION: - THE MICRO-MATRICES

7. FURTHER DIFFERENTIATION: THE MICRO-MATRICES

Although the dimensions of the Matrix are a distinct advance on Reissmann's typology mentioned earlier, (see Chart 1, p. 21), with only four categories, it is no more differentiated than is the Reissmann construct. Jung's allusion to an overlap between the functions, (Jung, 1964:60), is a helpful hint that there may be a way out of this dilemma, but no more. The presence of functions other than the dominant in individual orientations is recognized but not organized by Jung[1]. It is only when we return to Thompson, that a means of further categorical differentiation that fits the context of this study becomes clear.

Beyond his exposition and analysis of the dynamics of a primitive tribal hunt, Thompson describes how society has evolved, from a tribe of generalist hunters with specialisms, to more complex societies, where the generalist function has become de-emphasized, and specialist functions have become institutionalized, (Thompson, 1971:79 et seq.).

According to his thesis, the shaman eventually transmogrifies into the institution of religion, the headman, that of the state; the hunter becomes the industrial worker/soldier, the clown, institutionalized art and in our day, the media. But this is not simple, undifferentiated growth, where religion is served

---

[1] However, the Jungian analyst, Roger Woolger, has devised an intriguing link between the overlapping functions and the Hindu chakras, (Woolger, 1983). Although of considerable interest, it does not fit the context of this study, and will not be pursued here.

by a multiplicity of shamans, or the state formed of headmen ad infinitum. "As an institution grows in complexity", Thompson points out, "it becomes impossible to have all the members of one mind. A religion of mystics would collapse as an institution", (ibid.:81).

Institutional stability and continuity is dependent on differentiated growth, such that each institution becomes like a simple society. In institutionalized religion, for instance, the headman is represented by the bishop, the hunter by the cleric or scribe; the theologian takes the place of the shaman[2] and the mystic, that of the clown. Each functionary, as Thompson notes, holds a very different appreciation of the institution he serves, and tends to harbour a negative opinion of those whose institutional roles and viewpoint differ from his, (ibid,). Notwithstanding, institutional strength and cohesiveness is dependent on the ability of each to keep their natural disdain for the others under control, and to work cooperatively with them.

Building on this concept, one can reasonably postulate that each quadrant of the Matrix of Mind can be differentiated in the same quadrifid fashion. This idea will be elaborated as we turn our attention to the second stage of this investigation, which follows immediately. Here, we study an adaptation of the Matrix of Mind specific to the field of planning, which we call, guilelessly, "The Matrix of Planners".

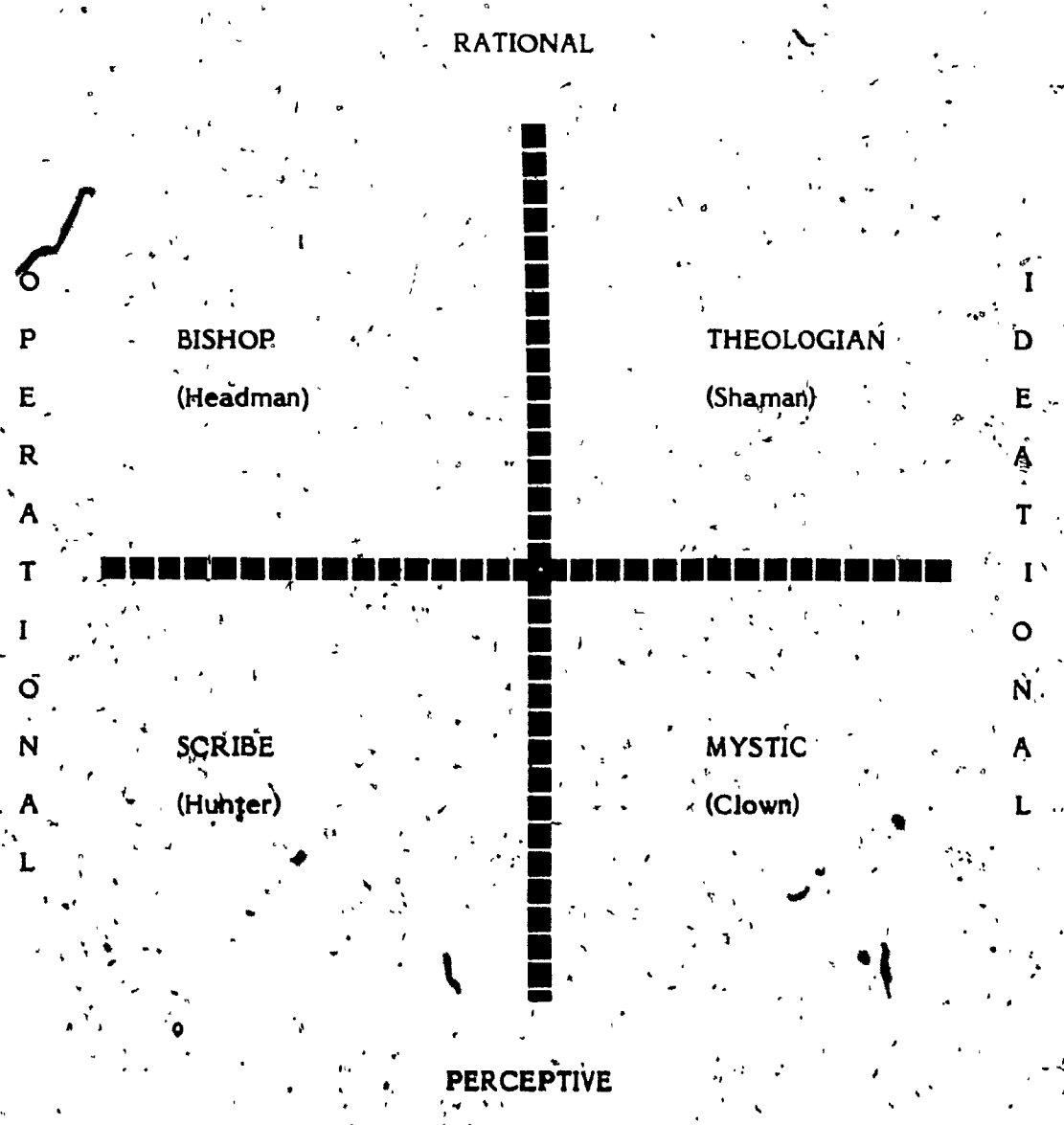
---

[2] Professor Woolger felt ill at ease with Thompson's equating of the shaman with the theologian. As Jung has pointed out, "The making of a medicine man involves . . . much agony of body and soul", (Jung, 1973:136) and this does not seem to be matched in the training and background of the theologian. Yet the differences between the primitive and civilized societies they respectively inhabit is, one suspects, no greater a contrast. In both cases, it is a true transmogrification, not simply a modification, that has taken place.

Diagram 9: The Shaman becomes Institutionalized as Religion*

(after Thompson, 1981:80)

* exemplifying that each quadrant becomes a microcosm of the whole.



8. STAGE TWO: THE MATRIX OF PLANNERS

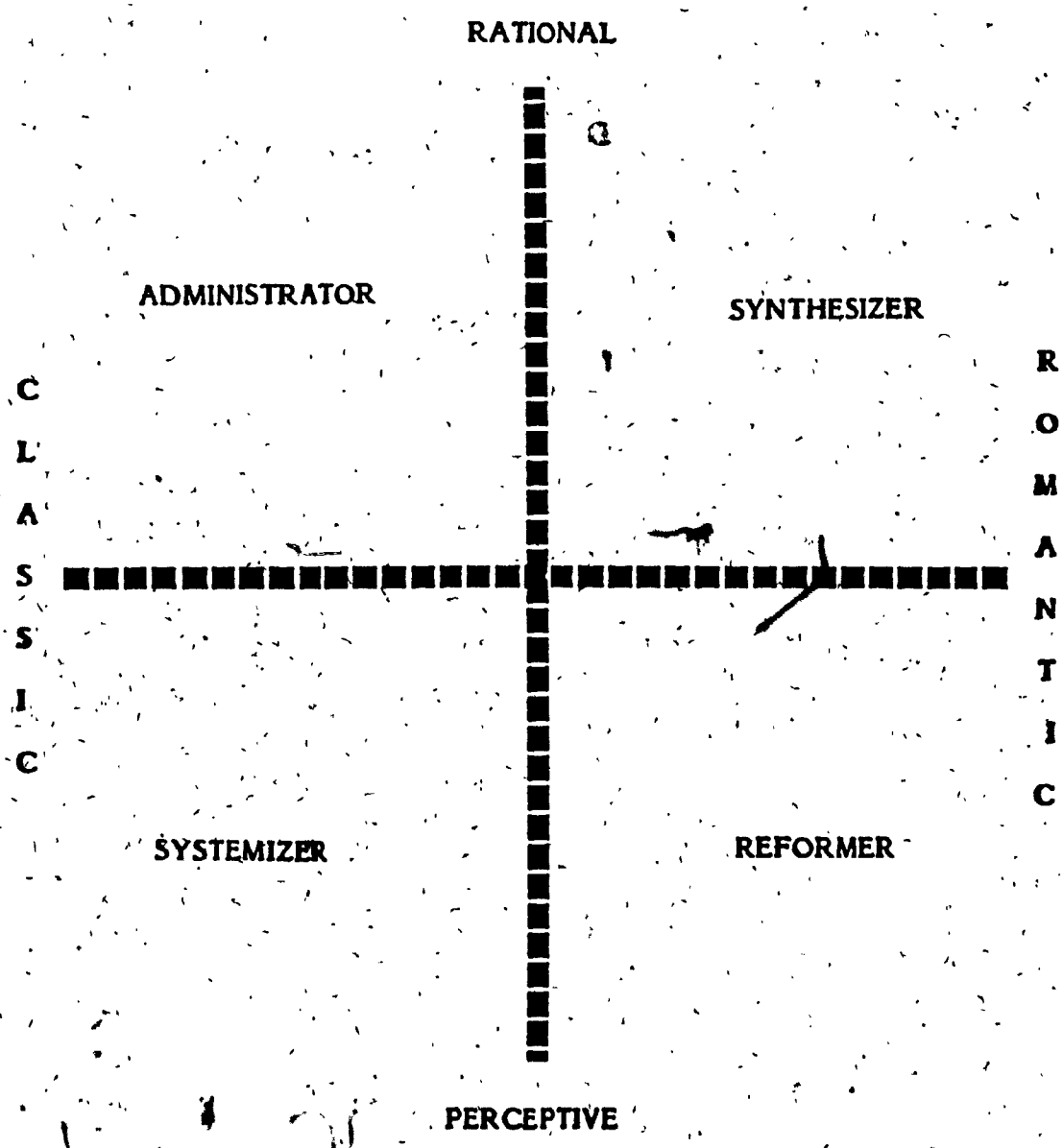
8. STAGE TWO: THE MATRIX OF PLANNERS

The basic Matrix of Planners is a replica of the parent Matrix of Mind; thus it is composed of four very different mindsets, or ways of looking at, and operating in the world, (see Diagram 10). The Reformers are the profession's Romantic Perceivers, who, guided by their feelings, realise something is wrong with the system. Being typically action-oriented, there is an inate desire to do something about the situation without delay; thus Reformers are idealistic instigators of change. Personally individualistic, (a trait of romantics), they show concern for the individual, especially if such individuals are not capable of fighting their own battles, or articulating their own concerns.

In contrast, the profession's Classic Sensers are Systemizers. Although affected by the ethos of change apprehended and articulated by Reformers, Systemizers are not the type to be swept up by rhetoric. Their natural inclination is rather, to "stop the world" while they survey it at a particular point in time. Other Systemizers will analyse the mapped or statistical data so developed, to put forward general concepts derived from it. Alternatively, as the profession's designers, they may create graphic images of the future city and its elements.

Needless to say, Reformers consider much of this useless pedantry, and "are frequently intolerant and even mocking of . . . what they think is a dysfunctional preoccupation with 'studies' ", (Dyckman, 1969:300). Nor does it go down well with the Classic-Rationalist Administrators. Facing the day-to-day problems of growth and change, they pragmatically seek to keep afloat the ship

Diagram 10 : Outline Matrix of Planners



of state so that the business of life can continue into the future in as orderly a fashion as possible. For them, social life is founded on routine. The interests of Systemizers are either too academic or too concerned with aesthetics for their tastes, while the demands of Reformers seem out of hand and dangerously innovative. Both will therefore be resisted, when they can't be ignored.

Finally, there are the Romantic-Rationalist Synthesizers, who have a broader outlook than the other three. Lacking the quotidian management problems of Administrators, dissatisfied with the static image of Systemizers and less engagé, yet more comprehensive in their world-view than Reformers, Synthesizers are motivated to seek a dynamic, balanced view of the planning function. While most will lack the warmth of feeling for the individual exhibited by the majority of Reformers, it is compensated for by the forward-looking attitude of the intuitive. This, combined with a holistic approach, allows them, at the best of times, to use the work of Systemizers, and to combine it with the exigencies of the Administrators. Like Henderson's mythical hero twins, they seek the balance that will, in the words of Whitehead, "preserve change in order and order in change".

Borrowing Berry's well-known concept of the city,[1] and adapting it to our concerns here, we are postulating that planners are systems within systems of planners. Assuming as do cyberneticists, that the universe is made up of sets of systems, each contained within one somewhat bigger, like a set of Russian dolls, theoretically, it would be possible to subdivide the Matrix of Planners on a quadrifid basis almost ad infinitum. But it would serve no useful purpose to

---

[1] Berry (1964) has proposed that "cities are systems within systems of cities".

pursue this differentiation beyond two levels of recursion[2], i.e. to the sub-matrix level. Indeed, further recursion would tend to confuse rather than elucidate. While one subdivision yields sixteen recognizable planners, a second subdivision would call for sixty-four. Even assuming all sixty-four were relevant categories, none of them forced into existence by the system, (a matter of some doubt), the effort would be supererogatory in terms of describing the concept, and counter-productive relative to conveying its meaning[3]. For this reason, Occam's Razor is evoked: the descriptions that follow delineate to the sub-matrix level of the Matrix of Planners only, (see Diagram 11).

The Romantic Perceiver: The Planner as Reformer

The Reformer is one of the earliest guises of the modern planner. Revolted by the double standard of the nineteenth century, when contrasts between rich and poor in the Western world were on a par with those of many third world nations today, it was the reformer's zeal and charisma that jolted the complacent middle classes into making far-reaching reforms[4], which, amongst

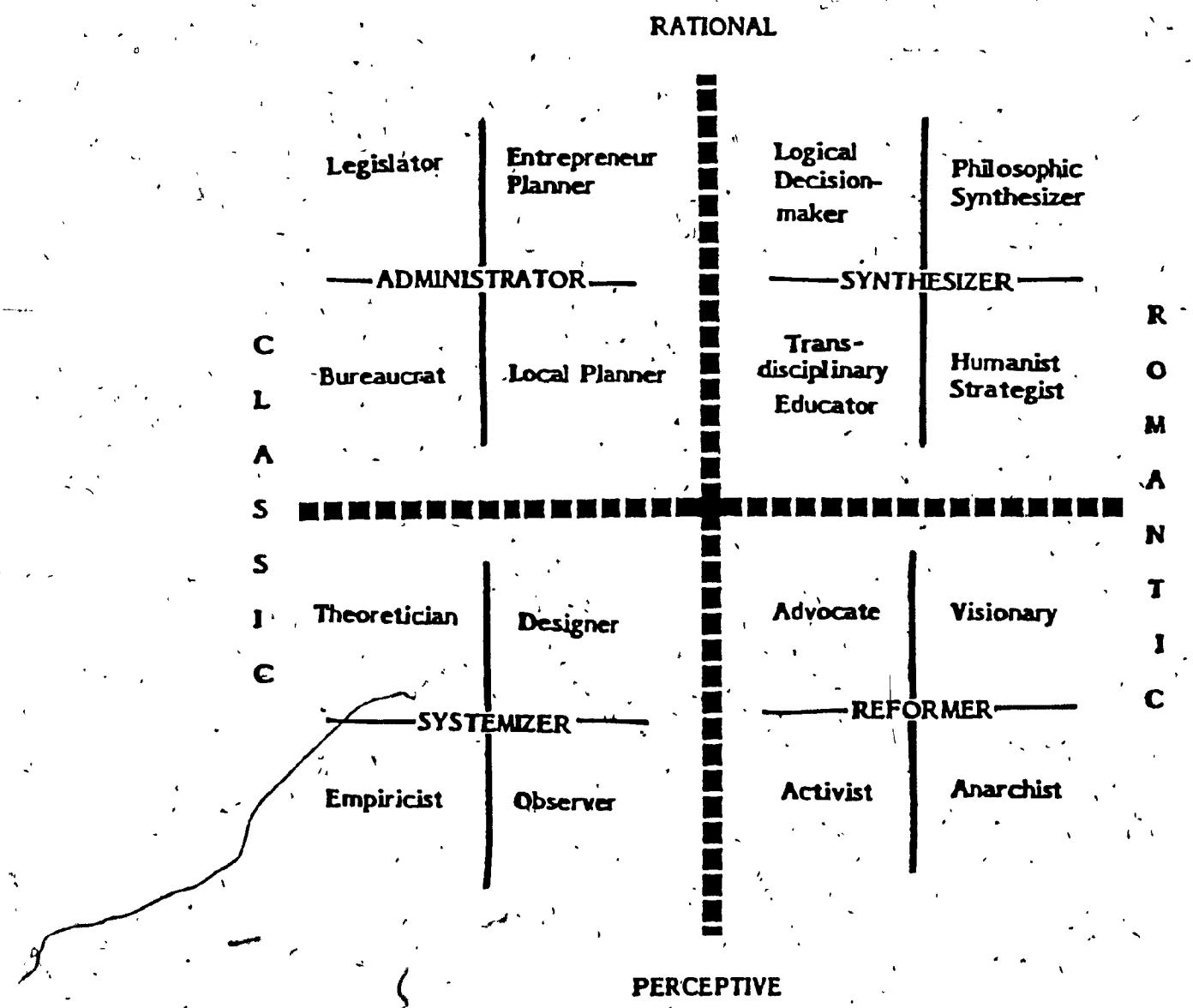
---

2 "[T]he level of recursion is simply the focus of attention at which we contemplate any viable system, and that one level is contained in the next", (Beer, 1974:58,59).

3 As Beer reminds us, although the brain is a high-variety dynamic system, it is finite: "[W]e can recognize [and describe] patterns up to a certain limit, and not beyond. Thus if something is going on that involves a higher variety than the brain commands, we shall not recognize what it is", (ibid.).

4 In Britain during this period, the names of reformers such as Shaftesbury, Torrens, Cross, Chadwick and Simon were associated with a series of legislative measures enacted to combat the growth of disease and squalor in the urban areas of the day, (Ratcliffe, 1975:29). In the United States, similar reforms were supported or carried out by such figures as Griscom, Waring, Chesbrough, Olmsted, (Peterson, 1983a: passim), Robinson, Thomas, Zueblin, Jones, and Downing (Peterson, 1983 b: passim).

Diagram 11: Comprehensive Matrix of Planners



other things, had as its product, the establishment of the modern practice of planning.[5]

Since this time, "the charisma has been routinized," (to borrow Max Weber's phrase), in the form of institutionalized planning, and the Reformers were little heard of for a while. Their reappearance in the late sixties and early seventies, in various guises, has again proven them to be society's gadfly. Contemporary conventional planners were shocked and perplexed, for they had always considered that they themselves were the bearers of the torch of the early reformers. To be included as part of the reactionary establishment in the Reformer Planners' bitter attacks left them bewildered. Even more bewildering to them were the Reformers' concerns. Grabow and Heskin (1973:106) provide a shortlist: "poverty, racism, repression and inaccessibility to decision-making". Conventional planners feel these are problems for the sociologist, the social worker, the political scientist, or the lawyer, but have little to do with the planners' traditional preoccupations---land use, zoning and traffic problems.

Nor do Reformers, as the "feelers" of the profession, appear always consistent and impartial, the sine qua non of conventional planning. Totally devoted to those who suffer most from the imperfections of the present system, the urban poor, they have no time for the middle class suburbanite. While other planners strain to make planning more systematic, the Reformers, being neither rational nor classic in their approach, are averse to it.

---

5 As Catanese (1974:16) puts it, "[T]he founding of the American Institute of Planners . . . [was] largely through the efforts of Frederick Law Olmsted and Flavel Shurtleff. These two men . . . epitomized the curious coalition of reformers and dreamers which organized a field of practice and study that became a profession".

In short, Reformers are right-hemisphere romantics in a world of left-hemisphere classicists. They have no patience for Systemizers, are contemptuous of Administrators, and afraid of Synthesizers. In their eyes, they are all "centralizers of power", and consequently diametrically opposed to their environmentalist or grass roots interests. Underlying all, are the rational modes of thought and the classic styles of the others that are unconsciously irksome to them:

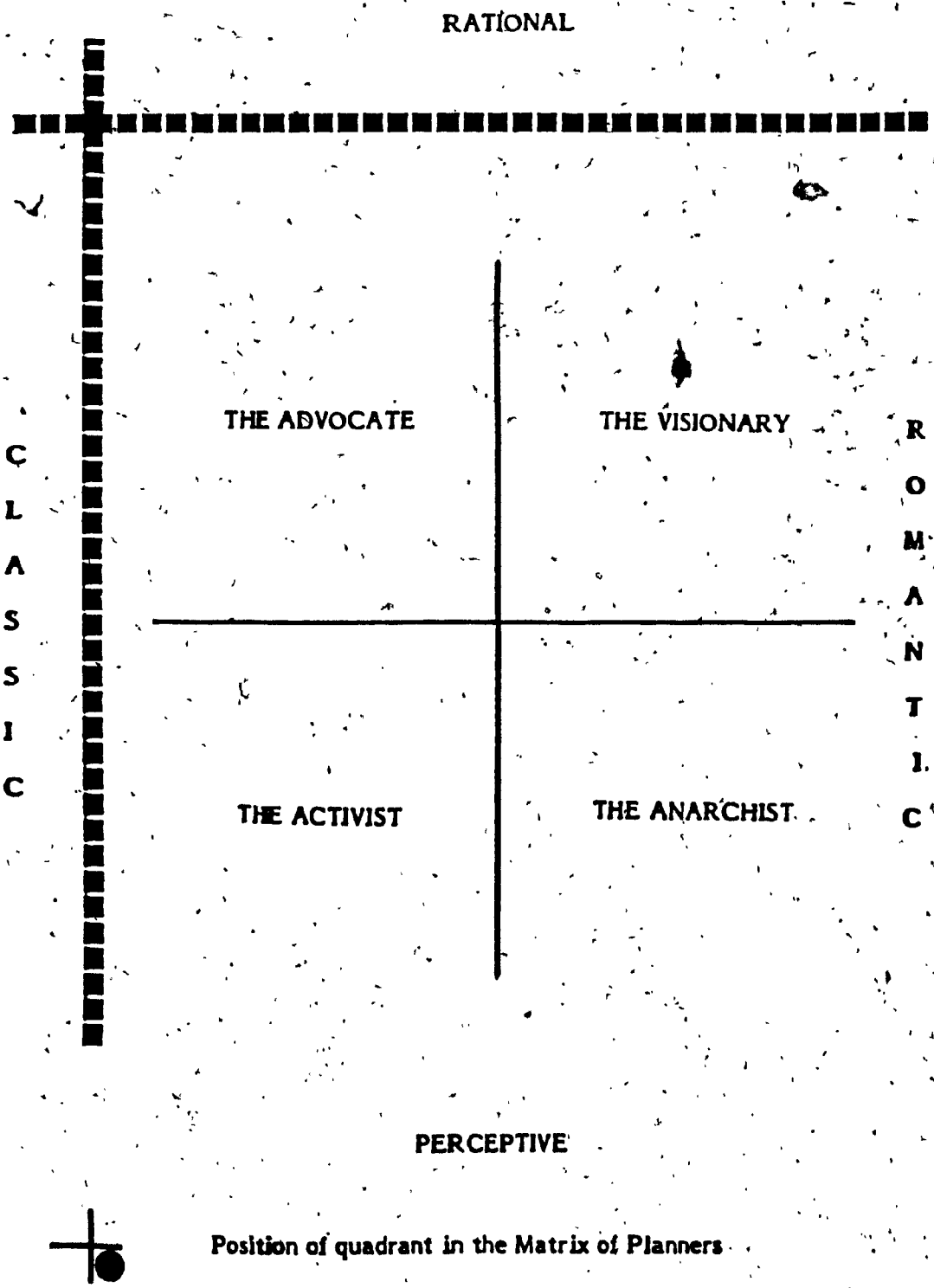
> To the romantic . . . [the] classic mode appears dull, awkward and ugly . . . . Everything is in pieces and parts and components and relationships. Nothing is figured out until it's run through the computer a dozen times. Everything's got to be measured and proved. Oppressive. Heavy. Endlessly grey. The death force.
> (Pirsig, 1975:67).

To other planners, it is just this rejection of the classic sense of order, and rational thought processes, either classic or romantic in style, that make the perceptive romantic so hard to negotiate with. Reissmann expresses the exasperation and frustration of those who have tried:

> [Reformer planners are] too individualistic to be led, and too authoritarian to be politicians in a democracy . . . . [They hold up] a façade of rationality . . . but . . . there is less reason and more emotion behind.
> (Reissmann, 1964:43).

Yet looking back over the changes that have occurred within the planning profession during the last two decades, one sees that a new balance has been struck. Environmental issues, critiques of high rise living and of the developers' "speculate and destroy" approach, the demise of city hall's "urban renewal" schemes, and the demand for slower growth and greater attention to existing buildings and neighbourhoods; the introduction of alternatives to development methods employed over the last thirty years, all stem, at least in part, from the initiatives of these, the "clowns" and "tricksters" of the profession.

Diagram 12 : The Quadrant of the Reformer



Position of quadrant in the Matrix of Planners

Although their aims differ little, the strategies of Reformer Planners vary considerably, according to which part of the Romantic-Perceptive quadrant each belongs. Four distinct types can be discerned: the Anarchist, the Activist, the Advocate and the Visionary, (see Diag. 12).

The Anarchist

Anarchist Planners are the rarest of all planning Reformers, for they are the purists---those who actually intend to carry out to the letter, the rhetoric of individual initiative and personal freedom for the people. It is really only they who, "in the light of the crisis in mass technocratic society brought on by political and social up-heaval in the cities . . . [and who], in the [sic] absence of a creative alternative, reject planning altogether", (Grabow and Heskin, ibid., 106). Etzioni provides the creed:

> Without authentic participation of the members of the community, on equal footing, no effective planning---de-alienating and genuinely responsive to human needs---can evolve.
> (Etzioni, 1973:107; original emphases).

Though probably unaware of Heisenberg's "Indeterminacy Principle", they would nevertheless agree that "the act of measurement changes the behaviour of objects under scrutiny". Thus, the expert must not interfere; people must just be encouraged to "do their own thing". To allow people to make their own mistakes, and live by their own values demands more restraint than most experts can muster; yet it is attempted by some.

The French planning journal, L'Architecture d'Aujourd'hui, published the hand-written frontispiece to cahiers, (newsletters) produced by a Belgian group calling themselves "Anarchitectes", (Dernoncourt, 1972:XLIII). After explaining,

jocularly, that "An-architecture" means "without architecture", while "Anarchi-tecture" means "a proliferation of 'deconsecrated' architectures controlled by their inhabitants", they go on to explain the function of their newsletter:

> We Anarchitects, who currently produce Les Cahiers d'Anarchitecture, have no pretensions. Just the opposite, in fact. We want to quickly phase ourselves out, so that YOU, the city dweller, whether specialist or not, can take over. Our magazine is written to help bring people together to build their city, so that in the end, it belongs to everyone, and the 'general interest' ceases to mean 'the interest of particular individuals or corporations'.[6]
> (Dernoncourt, 1972:XLIII).

Thus it would seem that the Anarchist, whether architect or planner, (the old titles, having been "deconsecrated", don't matter anymore), are seeking to re-introduce the concept of "non-pedigreed" city building, as in the vernacular traditions explored by Rudofsky (1964). Meanwhile, a few romantic architects and planners extol the virtues of linking "pop art, permissiveness and planning", (see Scott Brown, 1969; Venturi and Scott Brown, 1973); or instead of designing "beautiful monuments", seek, like Charles Moore, (1973), to weave their work into the fabric of the street.

Alternatively, while using modern materials and methods, they may, as does Safdie, return to the atavistic forms of the ancient pueblo or Old Jerusalem. Moreover, they have adapted the ancient non-pedigreed building methods, "a combination of assistance and self-help . . . (so that) prospective owners of houses could construct them and could be compensated for their labor by ownership", (see Safdie, 1970:218). This kind of approach has already been put into practice for the earthquake victims of Sarajevo, (see Ciberowski, 1975),

---

[6] Freely translated by this writer. For the original text, see Illus. 3.

ILLUS. 3: THE MANIFESTO OF THE "ANARCHITECTES"

Source: Dernoncourt, Jean, (1972), in L'Architecture d'Aujourd'hui, p. XLIII.

Les Cahiers d'Anarchitecture

(AN-ARCHITECTURE = SANS ARCHITECTURE)
(ANARCHI-TECTURE = PROLIFÉRATION DES ARCHITECTURES, CONTRÔLÉES PAR LES HABITANTS, ... DÉSACRALISÉES;)
(☺:))

sont actuellement édités par quelques anarchitectes. Ils ne prétendent pas à l'exclusivité. Leur ambition d'ailleurs est que, très vite, LES CAHIERS LEUR ÉCHAPPENT, et que ce soit VOUS, "spécialiste" ou pas, — mais de toute façon "habitant" —, qui les contrôlier. Cette revue, - qui n'est encore que "trimestrielle" -, se veut l'organe de liaison entre TOUS CEUX QUI VEULENT AGIR DANS LE CADRE URBAIN, POUR QUE LA VILLE SOIT ENFIN CE QUE CEUX A QUI ELLE APPARTIENT SOIT CE QU'ILS VEULENT QU'ELLE SOIT; POUR QUE L'EXPRESSION INTERÊT GÉNERAL cesse de signifier "Intérêt de quelques Particuliers" [individus ou Sociétés];

while the Center for Environmental Structure at Berkeley has devised an innovative participatory planning process for the 15 000 students and staff of the University of Oregon, (Alexander et al., 1975), based on a new "pattern language" they have developed, (Alexander et al., 1977).

This is to suggest, (echoing Thompson, 1971), that the far-out, crazy ideas of idealistic Anarchists, like the Anarchitectes, can be taken up by artist-designers, who popularize the idea. Eventually, the ideas may become the new convention, ready for the next generation of "crazies" to come along to question its validity. Thus, even the most wide-eyed Romantic-Perceiver unconsciously plays an important vanguard role in societal adaptation to change. As such, notwithstanding their clowning, Quixotic ways, they form an integral part of the Matrix of Planners. There must be room for them to dream their impossible dreams.

The Activist Planner

Activist Planners[7], though as much Romantic Perceivers as the Anarchists, take a more classic approach. Fundamentally it is their distaste for the disorder of the present system which makes them iconoclasts; they wish to replace it with a "New Order". Their belief in this latter moves them to be considerably less fastidious than the Anarchist Planners in following the creed of true equality---the Etzioni principle of "authentic participation". Their empathy for the impoverished in our society leads them to believe they truly understand their needs, and being more articulate than they, can legitimately speak <u>for</u> them.

---

[7] Note that Catanese (1974:41, 42) uses the term in a very different sense, to mean the bureaucratic planner type whose mentor is Metternich.

Robert Goodman is perhaps the prototypical Activist Planner.[8] Highly suspicious of conventional planning methods, he is convinced that standard public participation procedures are a sham, calculated to manipulate the opposition into submission, (Goodman, 1971:197). In the tradition of Saul Alinsky, (1972), Activists fight for radical change in government organization. Goodman's approach, which he calls "Guerilla Architecture", is motivated by the views of the French radical economist, André Gorz, who speaks of reform, "not in terms of what is possible within a given system or administration, but in view of what should be made possible in terms of human needs and demands", (Goodman, ibid.:187).

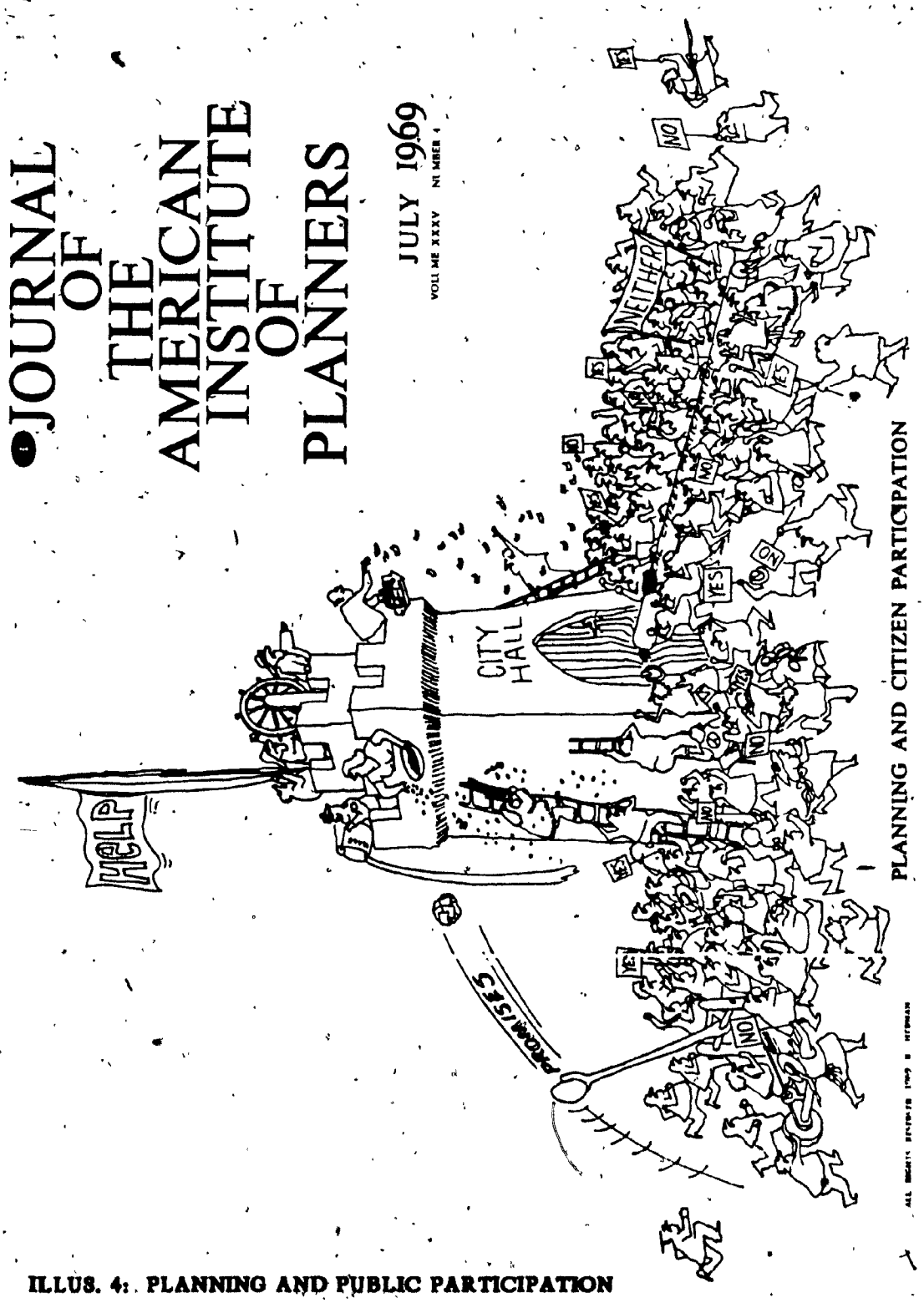
"Guerilla Architecture" calls for inner-city residents, under the guidance of sympathetic technicians and students, to adopt the "fait accompli" tactics of South American squatters.[9] The idea is basically "street theatre"---abandoned buildings or areas such as parking lots are taken over in a well-publicized act of defiance of the authorities. Even if squatters are quickly ejected, the tactic is still considered worthwhile if it succeeds in embarrassing the Establishment. By these means, it is hoped to gather a momentum amongst the poor and the concerned middle class, that will eventually lead to far-reaching reform, (ibid., 196).

No one can doubt Goodman's sincerity, but has he, and other like Activists, actually been able to circumvent the problems of inequality with which they are so deeply concerned? Peattie, an anthropologist with direct

---

8 But see also Cloward and Piven, (1975); Grabow and Heskin, (1973).

9 As described by Koestler in Thieves by Night, this technique was earlier exploited by Zionist radicals during the last days of Palestine.



ILLUS. 4: PLANNING AND PUBLIC PARTICIPATION

Source: R. Hedman, Journal of the American Institute of Planners, (cover)

experience in activist planning, views their approach with some misgivings. Ironically, the Activist's assumption of a leadership role and their choice of the public cause to be served, makes them prone to the same serious fault of which they accuse the classic-rational establishment planner: that of selecting a particular public to the neglect of others:

> The (sic) advocate planner's need to evoke and formulate issues makes him dangerously similar to other manipulators of the poor's interests .... (L)ike the establishment planner, (he) finds it easier to deal with some issues ---like housing--- than with others that might be more salient to some people in the area .... (sic) Advocacy planning for the local community miniaturizes but does not eliminate, the problems of conflicting interest which inhere in the planning activities of citywide agencies.
> (Peattie, 1968:80-86).

Ten years after Peattie had written these words, in Britain, the Wolfenden Committee (1978), expressed similar sentiments: "(U)neven social participation may mean that some groups benefit more than others . . . (and) some areas will be less endowed than others". Moreover, piecemeal planning such as that supported by Activists, "will not necessarily of itself allocate its energies in accordance with abstract criteria of need and equity", (noted in Wilmers, 1981).

Dilemmas such as these are never likely to concern Activists. Like Hoffer's "True Believer", their reactions are based on a burning sense of injustice, coupled with an unswerving adherence to the idea of bringing about a new order. This unbending conformity to rule leads at least one thoughtful observer to declare that "social action . . . is part of the problem not part of the solution", (Slater, 1974:193)[10]. Nevertheless, in extreme cases, radical methods

---

10 See also Gaylin et al., 1978.

may be the only kind that can cut through the communication barrier of complacency. Thus the activist is akin to the surgeon. Though their expertise is inappropriate as a first resort, when there is no other recourse, one welcomes those who act decisively and unsqueamishly. Normally, however, one much prefers the benign good spirits and quiet dedication of the Anarchist, whose "innovation will be modified in a thousand different ways as it spreads", (ibid.:194) than the more monolithic approach of the Activist. There are, too, other Reformers whose approach is less extreme, and in many cases, more effective than that of the Activist. We will review these now.

The Advocate Planner

Peattie's "slip of the pen", where she refers to Activists as Advocates, is indicative of a tendency to lump these two types of idealist planner together. Sometimes, this is due to a genuine misunderstanding; at other times, "advocate", being a more respectable term than "activist", the former is used as a euphemism for the latter. Still again, the two are sometimes used interchangeably, where their similarities rather than their differences are the points under discussion.

However, there are indeed significant differences: Goodman's contempt for advocacy planning techniques, just mentioned, should be enough to convince us of this.[11] Though the true Advocates share the concerns of the other Romantic Perceivers, and their zeal is often equal to that of the Activist, their mindsets can be easily distinguished. Of all those in this quadrant, they have the

---

[11] See also Cloward and Piven, 1975.

most classic-rational turn of mind. For them, democracy is as important as equality. They are as concerned as the rest that serious faults in the system be corrected, but they believe that these can still be resolved within the confines of the existing system. As Paul Davidoff, founder of the movement, has stated it, "radical criticism . . . if it is to be effective, must reach within the Establishment", (Davidoff, 1974:39).

Thus Advocate Planners are content to abide by the rules of society, while working to correct its oversights and imprecisions. They would therefore readily agree with Whitehead's sentiment, that "civilized order survives on its merits, and is transformed by the power of recognizing its imperfections", (Whitehead, 1955: 90), and unlike the Activist, is concerned for this survival. However, unlike their truly classic counterparts, their view of "civilized order" is of a particularly complex and essentially romantic kind, (in the technical sense we have been using here). Peattie explains:

> Advocate planners take the view that planning is the embodiment of particular group interests, and therefore they see it as important that any group which has interests at stake in the planning process should have those interests articulated. In effect, they reject both the notion of a single 'best' solution and the notion of a general welfare which such a solution might serve. Planning in this view becomes pluralistic and partisan---in a word, overtly political.
> (Peattie, 1968:81).

This was early elaborated by Davidoff, who underlines the centrality of the romantic, pluralistic and competitive approach of the Advocate Planner:

> The prospect for future planning is that of a practice which openly invites political and social values to be examined and debated. Acceptance of this position means rejection of prescriptions for planning which would have the planner act solely as technician.
> (Davidoff, 1965:331).

The role of the Advocate Planner has often been considered analogous to that of the legal advocate. Like them, they work within the rules and regulations of the legal and planning system; attending meetings, making depositions, doing research and generally pleading the cause of their less articulate and knowledgeable client or client community. But along with legal Advocates, there are a number of other advocate planners. The self-help Advocates are like those attached to the Urban Design Centre, in Vancouver, (1973), who produced a series of information booklets to aid the ordinary citizen through the difficulties of home buying and maintenance; providing both technical advice and help through the maze of bureaucratic procedures related to zoning, the building code, and so on.[12]

Then there is the official Advocate, one who is formally recognized and employed by government to practice some form of advocacy. In Britain, where the concept is particularly advanced, "Community Development Officers" have as their mandate, to seek out the "non-joiners", and articulate their point of view, (see Lewis, 1974: 851). Elsewhere, official Advocates are employed by a government agency to work with or establish local groups, so that grass roots objectives and objections are both expressed and accounted for, (see Lorimer, 1972:206, 207; Lash, 1976:27, 28).

Lastly, there are the design Advocates, who are similar to the self-help Advocates in their wish to aid the ordinary citizen to dispense with unnecessary domination by technicians or government. The Center for Environmental

---

[12] An entire issue of The Planner was recently devoted to the "self-help" movement in Britain, (see Journal of the Royal Town Planning Institute (Britain), 1981, 67:3, (May/June).

Structure at the University of California, Berkeley, represents a well-developed design Advocate approach, and vocabulary, or "pattern language", to be applied at all scales by non-technicians. The actual design process has been fully developed, and tested in an experimental approach to the development of the University of Oregon, (see Alexander, et al., 1975, 1977).

The Visionary Planner

The Romantic-Perceptive quadrant of the Matrix of Planners is completed by a group of planners that we, following Reissmann (1964:26,27), call collectively, "The Visionary". Though sharing the strong dissatisfaction with the status quo, which is the hallmark of those in this quadrant, this group differs from the others in certain significant ways. In particular, whereas the others are oriented on the existential moment, Visionaries are distinctly future-oriented. Their plans for altering existing environments are few. Instead, they almost invariably make a quantum leap into a future of their own choice and making. That, (to quote the Hibernicism), "you can't get there from here" does not concern them. Their whole interest is concentrated on graphically describing the apocalypse toward which society is heading, and the millenium which they conceive as Man's true destiny. However difficult or unlikely, society must heed the warning, must repent and change. Freely admitting that it is for others to translate their ideas into reality, they justify their approach as providing a much-needed sense of direction. As one visionary of our time has expressed it, valid plans can "hardly be conceived if the mind does not have a stored-up vision of what the possible can offer under optimum conditions", (Soleri, 1977:7), (emphasis added). The thought is valid, but for the unidirectional single-mindedness implied in the

singular vision of Soleri's statement. This is the fatal flaw: "The visionary . . . [makes] the tacit assumption that his values . . . [are] shared by most other people", (Reissmann, 1964:46).

Just because Visionaries are not interested in conventional plans and planning techniques does not mean a disinterest in plans as such. On the contrary, as Reissmann points out, their own kind of plan, verbal or graphic, is the centre of their attention:

> The visionary's ideals are contained in The Plan: a blueprint, more or less detailed for building into reality those forms, those values, and those qualities which he believes the city must contain . . . . In its fullest form, the blueprint includes not only plans . . . but also . . . what urban social institutions are to be included, and even the new psychology of the urbanite that is to emerge from all this . . . . It is a manifesto for an urban revolution.
> (Reissmann, ibid., 40).

As with the Advocate, differences between various types of Visionary are striking; the most significant differences lend support to the dichotomy between right and left hemisphere thinking, (see Chart 3). The typical "left hemisphere" Visionary, we have called, "The Revisionist", while his right hemisphere counterpart has been named "The Utopian". Revisionists are noted for their writing ability. Whether these particular visionaries have developed design skills seems doubtful; at least there is no indication in their publications that they can either draw a map or draft a building elevation, nor have an interest to do so. However, their writing is of a high calibre ---clear, sonorous --- often charismatic. They are, in fact, to borrow Hoffer's term, "Men of Words", (Hoffer, 1980:137-150).

The doyen of Revisionists, with half a century of experience and more than twenty major books to his name, is Lewis Mumford. Equally sage and

prolific, originally as a researcher, and latterly as a Revisionist, is the late Margaret Mead. Jane Jacobs' revisionist efforts have been largely journalistic, but she has also produced three major revisionist books, (1961, 1969, 1984). Younger revisionists, such as Reich (1970), Roszak (1975), and William Irwin Thompson (1971, 1972), may well be only at the beginning of their output, while intellectuals such as John Friedmann, (1973), and David Harvey (1973, 1976), occasionally assume the Reformer role.[13]

In contrast to the verbal felicity of the left-hemisphere Revisionists, is the verbal awkwardness of the right-hemisphere Utopians. Writing and speaking do not come naturally to them. Their prose is often obscure and difficult, and by no means always convincing. This is because their forte is either the mathematical formula or, (more frequently), the graphic image. When Utopians design in this way, they are in their right-hemisphere element. But like the penguin, who swims with consummate grace, but cuts a grotesque figure walking across the ice, in contrast to their clear graphic designs, Utopians' verbal communications are frequently far from lucid or illuminating.[14]

---

[13] Note that many Revisionists are not professional planners, yet it is clearly legitimate to include them in the Matrix of Planners, since their concerns involve "the linkage between knowledge and organized action", i.e. planning as defined by Friedmann & Hudson, (1974:2).

[14] Perhaps the most obscure writer amongst the Utopians is the late Buckminster Fuller. In the following, he writes of his apprehension of the universe: "...I mean by structures ... the inherently regenerative local constellar subpatternings of universe. Since by my own definition universe is the historically synchronous aggregate of all men's consciously apprehended and communicated (to self or others) experiences and since the experiences are each finite but non-simultaneous yet dynamically synchronous structure, which is unitarily non-conceptual as of any moment, yet as an aggregate of finites is sum totally finite", (Fuller, 1965:58), (original emphasis). Fuller seems to be saying that the concept of the universe at any point in time, is composed of the sum total of each individual's apprehensions of its nature,

This completes the review of the various types of Visionary, and of the Reformer-Planners as a whole. These descriptions tended to emphasize the differences between Anarchist, Activist, Advocate and Visionary. Their similarities, based on their mutual Romantic-Perceptive bias, will become more apparent as one is able to contrast them with those who occupy the other quadrants of the Matrix of Planners.

The Classic-Perceiver: The Planner as Systemizer

Having described the Perceptive-Romantic planners, we come now to the realm of the Classic-Perceivers, a sub-group of planners we have called generically "The Systemizers". They too are pioneers, but of a very different kind from the Reformers. Trading the "hot-line" feeling of the Romantic Perceivers for the cooler perception of the "senser", their philosophical roots go back to Hobbes, whose view, as admirably summarized by Paul, was that . . .

> there are no conceptions in a man's mind which do not have their origins 'in that which we call SENSE'. Memory is of sense-impressions: imagination is decaying sense. All the complicated processes of human thought are built up out of multitudes of sense impressions. What distinguishes man from the beasts is his ability to give things names. It enables man to transfer his train of thought, or of mental associations, into a verbal train, and so to communicate experiences one to another, and to reason (or reckon by names) about them. (Paul, 1953:61), (emphasis in the original).

Thus the Systemizers are often the namers in the planning field ---social

---

which, though they may not fit together in Cartesian (i.e. classic) fashion, nevertheless together portray a comprehensive image. This is of course, a typically romantic, right-hemisphere view. Lack of complete order or consistency does not disturb them, as it does their classic counterparts. They have, as Ingall's terms it, a "high toleration of ambiguity", (see Ingalls, 1976, Chap. 3). Fuller is by no means alone in his Utopic obscurity. The distinguished architectural critic, Peter Blake, admitted he was "not really in a position to write a traditional foreword to Soleri's book . . . because I am not sure I understand it", (Soleri, 1977: n.p.).

scientists who believe the individual is more in focus when viewed collectively, as a member of groups, each with statistically consistent characteristics or patterns or ranges of behaviour. It is these, then, that they name. Alternatively, Systemizers may be manipulators of the physical environment designing relationships between its various elements.

Reality as viewed in terms of the Reformers' gut feelings, is to Systemizers distinctly mythological; it offends their classic sensibilities. They look for the structure below the form of appearance. Nor do they allow themselves to get emotionally involved in the phenomena they are studying. If, after gathering the facts, they express an emotional reaction, (as some do), they cease to be disinterested scientists, or designers, and may, at this point, take on the mantle of the reformer ---albeit, an informed one.

It is this lack of engagement, their meticulous, disinterested objectivity, which infuriates the hot-blooded, action-oriented Reformer. Romantics, always engage, have no time for people who, in Pirsig's words, see "everything . . . in terms of pieces and parts and components and relationships . . . to be measured and proved". But the Systemizers' appearance of coldness and of a total lack of feeling, is partly deceptive. It is not necessarily lack of human warmth and understanding, but rather a belief that they must adopt a strong personal discipline in their work if it is to have any validity. As social scientists, they must consciously suppress personal emotion, so that their gaze can remain steady, and their analyses reliable. The facts will then speak for themselves.[15]

---

[15] It is this quality of mind that, for instance, distinguishes Lincoln Steffens from the other "muckrakers" of his era, (Chase, 1956: 229, 230). One also sees it in the ethnographic reportage of Oscar Lewis (1959). As La Farge notes, he "points no morals, draws no conclusions . . . and . . . with great restraint, makes no comments", (in Lewis, 1959:viii).

In its degree of systemization and power of prediction, social science falls far short of physical science. This may simply be due to its very much shorter history---barely a hundred years, compared to the several centuries devoted to the development of the physical sciences, (see Gillispie, 1960). Whether social scientists will ultimately reach the same degree of refinement need not concern us here; for our purposes, it is enough to note, that their method is identical with that of the physical scientist. As Johnson describes it, the scientific method has the following qualities:

> 1. It is empirical: that is, it is based on observation and reasoning . . . and its results are not speculative . . .
> 2. It is theoretical: that is, it attempts to summarize complex observations in abstract, logically related propositions which purport to explain causal relationships in the subject matter.
> 3. It is cumulative: that is, sociological, (and other social scientific) theories build upon one another, new theories correcting, extending, and refining older ones.
> 4. It is nonethical: that is, sociologists (and other social scientists) do not ask whether particular social actions are good or bad; they seek merely to explain them.
> (Johnson, in Douglas et al., 1964:338).

Not everyone will agree with Johnson's definition of scientific method, with its implied bias toward empiricism, but it does embrace the point of view of both the pioneer social scientist who are exploring new fields, (here called "Observers"), along with the many who with Johnson follow the Baconian doctrine of veritas naturae, i.e. nature is an open book for those with pure, unprejudiced minds, (Popper, 1963:6). Other Systemizers would object to the subordinate role assigned to theory by the empiricists, and would not hold speculation in such low esteem.

These "Theoreticians", (as we may reasonably call them), will, with Popper, (ibid.,140), maintain that few theories are developed from an inductive

base. In any event, the origin of a theory is of secondary importance, and has little to do with whether it is scientific or not. "What is important about a theory is its explanatory power, and whether it stands up to criticism and tests", (ibid.).

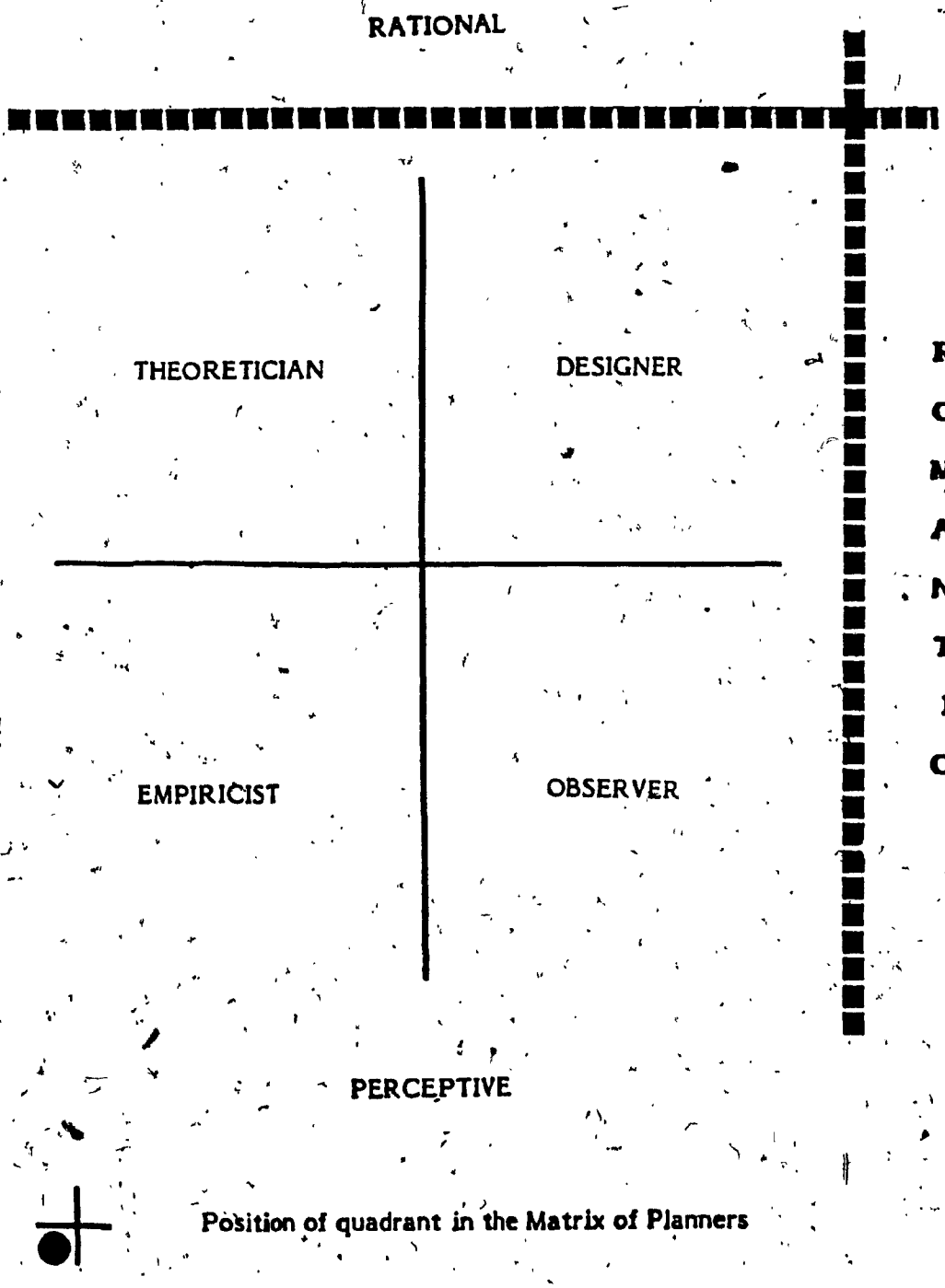
Yet, as already mentioned, another group of Systemizers---those of a more intuitive turn of mind---are not primarily interested in research, but in ordering or actually creating the designs that alter the environment. These, we call simply the "Designers"---including urban designers, site planners, and at another level, the landscape architects and the environmentalists, (see Diag. 13).

The following notes describe in more detail, each of these Classic-Perceptives, beginning with the Observer, followed by the Empiricist, the Theoretician, and lastly, the Designer.

The Observer

Observers are pioneers. They are the discoverers of new fields of knowledge, who with their followers are avant garde travellers in new physical or intellectual territory. They may begin as rank amateurs, having to forge the tools for their observations from nothing; but this very act makes them professionals, and differentiates them from those who choose a discursive, value-laden approach, or practice a pseudo-science, of collecting data to "prove" a preconceived, (i.e. feeling) idea. In contrast to these others, they are the pure scientists, collecting data for its own sake; observing, but not judging. More than their confreres in the Systemizer's quadrant, Observers use their senses directly as the means for gathering data. They are normally one-to-one with the object under investigation, looking, listening, measuring, mapping, asking

Diagram 13 : The Quadrant of the Systemizer



Position of quadrant in the Matrix of Planners

questions. The furthest from direct contact might be a mail or telephone survey. Apart from these latter, Observers are fieldworkers. Only after collecting their data will they sequester themselves in the calm of their study, to organize, classify and record the results of their observations in the field.

The first geographers and sociologists were observers of this kind, as was the early twentieth century biologist-turned-planner, Sir Patrick Geddes. Lewis Mumford bears witness to his pioneering in the following excerpt from his introduction to an early anthology of Geddes' work in India:

> The life and work of Patrick Geddes prefigure the age in which we now live. The tasks that he undertook as a solitary thinker and planner have become the collective task of our generation. Over the terrain that he explored as a scout, a whole army is now moving into position.... Today one needs historic perspective to realize how radical and far-reaching were his departures.... Geddes' influence is not the less impressive because so much of it, by now, is anonymous. Without any propriety label, his thoughts go marching on.
> (Mumford, in Tyrwhitt, 1947:7).

To give two other outstanding more recent examples of Observers at work, Gans, made a study "of a single new suburb, Levittown, New Jersey, in which . . . (he) lived as a 'participant-observer' for the first two years of its existence to find out how a new community comes into being, how people change when they leave the city, and how they live and politic in suburbia", (Gans, 1967:5). He insisted on this first-hand empirical experience as a basis for the formulation of his concepts.

Similarly, the late Kevin Lynch did not assume how non-professionals view their city; he went out and asked them directly, (Lynch and Rivkin, 1959; Lynch, 1960). As expressed in a recent obituary, "Until Lynch's work began to be publicised . . . (no) members of . . . professions concerned with the design of the

environment generally consulted the public . . . before deciding what was esthetically important and consequently worthy of government action", (Langdon, 1984:12,13).

In his concern for "The Image of the City", Lynch showed himself also to be another kind of pioneer observer---he was the first to articulate the dimensions of that image: "paths, edges, districts, nodes, and landmarks", and to coin such other neologisms as "grain" and "imageability", (Lynch, 1960) to express certain related qualities.

In like manner, Yi-Fu Tuan recently shed the first steady light on environmental perception, attitudes, and values, describing these comprehensively as "topophilia":

> The word "topophilia" is a neologism, useful in that it can be defined broadly to include all of the human beings' affective ties with the material environment. These differ greatly in intensity, subtlety, and mode of expression. The response to environment may be primarily aesthetic . . . [or] tactile, a delight in the feel of air, water, earth. More permanent and less easy to express are feelings that one has towards a place because it is home . . . .
> (Tuan, 1974:93).

The Empiricist

Observers adhere closely to "the theory of . . . Hume . . . that knowledge streams into us through our senses, and that error is due to our interference with the sense-given material . . . . [Thus] the best way of avoiding error is to remain entirely passive and receptive", (Popper, 1971:213). In contrast, Empiricists would tend to agree with Popper (and Kant) that:

> knowledge is not a collection of gifts received by our senses and stored in the mind [or elsewhere] as if in a museum; but that it is very largely the result of our own mental activity; that we

> must actively engage ourselves in searching, comparing, unifying, generalizing, if we wish to attain knowledge. (Popper, ibid., 214).

Thus Empiricists are inductive thinkers par excellence. Basing themselves either on their own research, or that of Observers, they develop a rounded explanation of the nature of the phenomena under study.[16] This is not to suggest that they invariably collect information without a preconceived purpose; they may well begin with a speculative hypothesis.[17] However, unlike pseudo-scientists, who contrive their methods to favour their hypotheses, true Empiricists are primarily interested in what truths the data will reveal. They will be as pleased if their original hypotheses are proved conclusively in error, as they will be if their research corroborates it.

Urban sociology, as practised in the years following World War I, provides a good example of classic empirical thinking. The discipline was founded by Park and Burgess, and continued by their students in the graduate program of the University of Chicago, (Hatt and Reiss, 1965:3). Robert and Helen Lynd's studies of Middletown, (1929) and Middletown in Transition, (1937) are models of pure empirical research; the first examining the effects of industrialization on American community life, the second, the impact of the depression.

Ekistics is the journal of the Athens Center of Ekistics. The following edited version of the Ekistics "manifesto", printed on the back cover of

---

16 For typical examples in the planning field, see: Chapin, (1971), Qadeer, (1974), Onibokun, (1974).

17 Popper maintains that this invariably occurs and that "there is no such thing as unprejudiced observation". Perception, he believes, is always in the context of interests and expectations, therefore conjecture and hypotheses always precede observation or perception, (Popper, 1976:51).

each issue of this journal, also indicates a classic empirical approach to the development of a "science of human settlements", as Doxiadis, the founder of the Ekistics movement defines the term:

> Ekistics . . . (the) science of human settlements . . . (is) influenced by (the) economic, social, political, administrative and technological sciences and the disciplines related to art . . . . (Its) task is to examine . . . settlements from every . . . point of view . . . : the geographic dimensions . . . ; the economic and social aspects . . . ; the sequence of procedure from analysis . . . to plans . . . . (Ekistic studies) cover the whole earth and . . . all types of settlements in all types of surroundings . . . cultures and civilizations, and in all periods . . . . (T)o develop this science to the point of being prescriptive and not just descriptive, Ekistics has a long and difficult road to follow. We must work hard for generations to come.

Pre-World War II geographic studies did not even have a guiding theme; indeed, they seemed to avoid having one on principle. Hartshorne (1939) blandly announced that "no universal need be evolved, other than the general law of geography that all areas are unique". This has led to complaints that "the output of a professional commitment to this view is the overproduction of a corpus of detailed descriptive studies without theme and direction, a mountain of irregularly shaped artifacts without the modular structure or the cement of theory to combine them into an edifice", (Carey, 1971:135).

The demise of the Chicago School of Urban Sociology points to another danger: "In its later phases, the work of the Chicago School . . . tended toward radical empiricism. Its research output emphasized the problems involved in collecting and analyzing demographic data and gave little attention to how these data could be used", (Gutman and Popenoe, 1970:5); thus pure empiricism can drift into the problems of the researcher-collater, rather than dealing with the development of empirical research itself.

Directly in the field of planning, similar negative results have sometimes occurred. McLoughlin puts it down to a crude interpretation of Geddes' admonition to "survey before plan":

> The great benefit of the Geddesian Heritage is a . . . concern for this principle of diagnosis before treatment . . . . [M]isunderstanding and unimaginative interpretation . . . has led to . . . collecting information for its own sake, unselective and uncritical wallowing in facts and figures, impressions and maps, charts and diagrams, trends and influences. Worst of all, many plans seem to bear little if any relationship to these great catalogues of information; it is almost as if . . . information-collecting was a . . . ritual . . . an appeasement of some planning god to ensure his blessing on the plan . . . ;but how the word is made flesh (or the survey into a plan) is a mystery too deep to be plumbed . . . .
> (McLoughlin, 1969:125, 126).

If these dangers are avoided, however, Empiricists offer a model with much to commend it. Ideally, they are open-minded and "able to avoid the pitfalls of total ideologies . . . [and] may even be able to see through . . . [them] and the hidden motives that inspire them", (Popper, 1971:215).

The Theoretician

Theory simply means "an attempt to weave together in systematic and logical fashion, a set of propositions about relationships between facts", (Reissmann, 1964:122). As such, it can be arrived at empirically, i.e. by induction, however, the theoretical approach gives primacy to the deductive mode of thinking, where propositions precede data collection. The contention here is that measurement cannot make sense unless a theoretical framework has been established which specifies what is to be measured and why. As Popper points out, "there is no such thing as an unprejudiced observation", (Popper, 1976:51). Thus, although the distinction between empiricist and theoretician is not absolute, there is a

recognizable difference in emphasis and orientation.

In reporting on the current teaching of planning theory, Hightower, (1969:326), distinguishes between "theories of the planning process---procedural theories---and theories concerning phenomena with which planning is concerned".[18] The Theoreticians we recognize here, are those concerned with planning phenomena. Their classic-perceptive stance demands they be down-to-earth, leaving the more esoteric procedural theories to their rational-romantic counterpart.

A prevalent feature of Classic-Perceptive theorists is their specialism. Their interests often are concentrated in a single field of academic research; even in a single aspect of that field. The dangers of specialization, with its "tunnel vision" need not be elaborated upon here, and Hedman sardonically comments on the dangers of theoretical fad and fashion, (see Illus. 5). However, the advantages should not be overlooked. The Theoretician's singleness of purpose allows concentration in depth on particular aspects or problems. There is therefore no reason to look with scorn on this type of theorizing, for along with the work of the Empiricist, it forms the grist for the less common but extremely valuable macro-theorists.

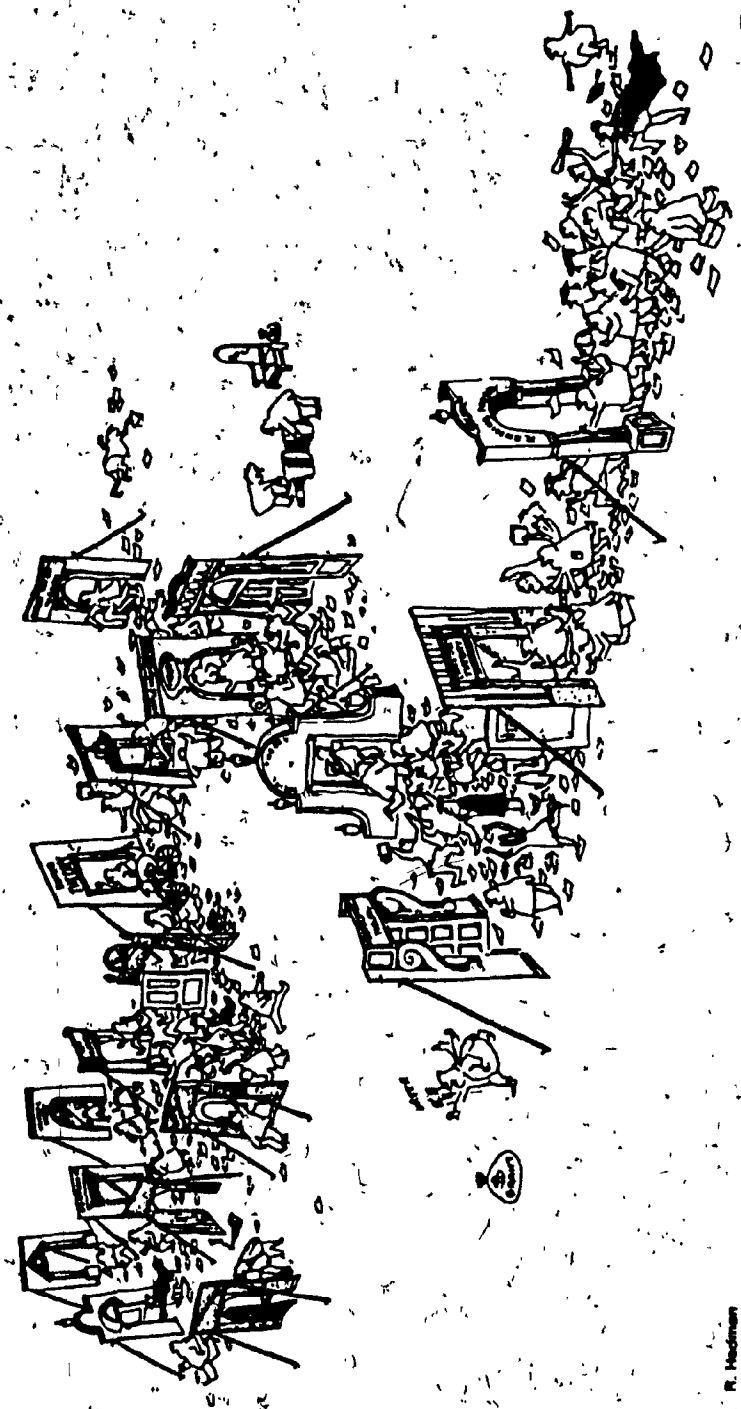
One of the classics in the literature of urbanism is Louis Wirth's Urbanism as a Way of Life. His work typifies that of the macro-theoretician, the type of theoretician who discerns pattern in the myriad of specialized studies produced by the micro-theoretician and the Empiricist. The Macro-Theoretician's work

---

18 This distinction is similar to that made by Faludi, (1973:4), between a "theory of planning" and a "theory in planning", the latter being our concern here. (The theory of planning is of prime importance to many in the Rational-Romantic quadrant of the Synthesizer, see p. 122 et seq.).

ILLUS. 5: THE DANGERS OF THEORETICAL FAD AND FASHION

Source: R. Hedman, in Catanese, Anthony J., and James C. Snyder, (eds.), (1979), Introduction to Urban Planning, New York. McGraw-Hill, pp. 104, 5



R. Hedman

consists of defining over-all concepts which tie the specialized studies into a more general body of knowledge. Here Wirth explains why he wrote his book:

> In the rich literature on the city we look in vain for a theory systematizing the available knowledge . . . . We . . . have excellent formulations of theories on . . . special problems . . . and . . . a wealth of literature presenting insights of sociological relevance and empirical studies offering detailed information on a variety of particular aspects of urban life. But despite the multiplication of research and textbooks on the city, we do not as yet have a comprehensive body of competent hypotheses which may be derived from a set of postulates implicitly contained in a sociological definition of the city. (Wirth, 1938:116), (emphasis added).

Though their methodology was not always impeccable, (there was a tendency to select facts, speculations and second-hand observations from different societies to fit neatly into their theoretical framework), the nineteenth century evolutionary theoreticians have had a considerable influence on social scientific analysis. "After all, they included not just obscure analysts of this or that, but leading social scientists like Marx, Engels, Durkheim and Spencer", (Finnegan, 1973:46, 47).

Turning our attention directly to the field of urban and regional planning, there is some truth in Perloff's complaint that "the urban planning field has not yet accepted the research function as critical to its success. Its tools are mostly derivative and its techniques underdeveloped, yet the effort to improve these is extremely limited", (Perloff, 1971:120).[19] Nevertheless, the field is not without its macro-theoreticians. Early in the sixties, the Tamiment Institute and

---

[19] This states the case for including here, reference to many who are affiliated with allied professions, but whose work is recognized as adding to the planners' understanding of their field. They have virtually been adopted by the profession, as witness their frequent appearance in the reading lists of courses in planning programs.

Daedalus sponsored a closed conference to which a dozen eminent planners contributed. The published results that emanated from this conference set the pace for planning in the following decade, (see Rodwin, 1961).

With Dyckman as a link with this former group, three years later, another half dozen theorists made their contributions to the profession's theoretical base. Under their instigator, Catherine Bauer Wurster, they optimistically conceptualized their work as "leading toward a more effective framework for intensive expert analysis. . . . to forge [thereby] the missing link in public communication: a common image of the nature of the modern urban community, its essential purposes and how they can be fulfilled", (Webber, et al., 1964:9).

That commonality of image did not survive intact into the seventies, however. Ironically, in the same year that the report of the proceedings of that conference was published, as the joint output of this latter group, one sees the rise of a different world. As Erber puts it, "the rattle of gunfire in the streets of Harlem in 1964 and the incendiary conflagrations that lit the night sky over Watts in the following year heralded the detonation of the social dynamite that had accumulated", (Erber, 1970: xi).

The world of urban planning that Erber conceptualized was one "in transition", and most of the contributors to his anthology were, either too shocked and amazed, or too busy finding ways to put out metaphorical fires to be concerned with the niceties of theory. For American planners, Watts was a wake for the "old veritles" developed in the previous decade, and Erber's contributors were celebrants dancing with the corpse.

Yet at the same time, other, more cogent theories were being developed, but as they are not based on classic perception, but romantic rationalism, they

will therefore be brought out when "The Rational Romantic Quadrant of the Synthesizer" will be discussed, (see p. 122 et seq.).

The Planner as Designer

Three design professions provide the foundations of modern design planning: engineering, landscape architecture and architecture. Typically each makes the exaggerated claim to being the designer of the modern urban and regional environment, but it is a basic tenet of this thesis that all are involved in the translation of knowledge into action---what we call planning; as such, all three form part of the mosaic we have here devised---the Matrix of Planners.

Engineering interests in city planning stretch back into the nineteenth century, to the first plans for sanitary sewer systems, (Peterson, 1983a), and forward, through the post-war traffic engineers, who with their freeways and expressways, transformed the metropolis into an "autopolis"; to the engineers now providing the technical expertise needed to make viable the revived public interest in mass transit.

Landscape architecture's roots in planning also go back to the last century, to the city parks of Frederick Law Olmsted and other members of the American Park and Outdoor Art Association, (Peterson, 1983b). (In Britain, the tradition goes even further back, to "Capability" Brown and Humphrey Repton.) A prominent critic of landscape architecture, points to that profession's unswerving championing of urban design: "In the 1960s and 1970s, when planners were spinning themselves off into "process" and architects were . . . into an egotistical preoccupation with "my building", landscape architects were there to fill the gap, often intervening in the development process on behalf of nature",

(Grady Clay, quoted by Knack, 1984:5). To be sure, the man who wrote the influential book, Design with Nature, calling in the late sixties, for a broader, more responsible, ecological approach to environmental design, is a landscape architect, (McHarg, 1969).

The Architectural Roots of Urban Design

While in no way diminishing the significance of engineering and landscape architecture to urban design, it has to be admitted that architectural influences have been of a complexity that a more detailed exposition is demanded. A founding discipline of planning in general, architecture is particularly associated with urban design. Even today, a large number of urban designers would begin their academic training as architects. A few years ago, they would have called themselves "architect-planners". At the turn of the century, when, apart from pioneers like Geddes, (q.v.), there were no planners per se, urban design was considered to be "architecture writ large"---and undertaken, of course, by architects.

A leading figure of that period was the American architect, Daniel H. Burnham, who for the delectation of the millions visiting the Columbian Exhibition in Chicago in 1893, reintroduced the civic design style of the Baroque. Accustomed to the ugly chaos of laissez faire urban development, the crowds were full of enthusiasm for his "White City", and the idea of the "City Beautiful" was born.

But once the euphoria had subsided, of the "make-no-little" plans responding to Burnham's famous exhortation, (see Illus. 6), there were precious few. Apart for Burnham's own plan for Chicago and McMillan's revamping of the

ILLUS. 6: BURNHAM'S MANIFESTO

Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be Order and your beacon Beauty.

L'Enfant plan for Washington, D.C., there was only a comprehensive plan for Harrisburg, Pennsylvania which was never acted on. In fact, Peterson, (1983b), is prepared to say that the real "City Beautiful" movement was not to be found in these grandiose plans, but in three, much more modest, but at the same time, far more widespread manifestations of the movement. He refers to the advent of piecemeal "municipal art" in the larger cities, small-scale beautification, (linked with cleanliness and moral uplift), in the small towns, and the large urban parks of Olmsted and his school.

During the inter-war period, urban designers, due perhaps to the failure of the City Beautiful movement, turned their attention away from the city, toward the designing of small new towns, following Ebenezer Howard's (q.v.), attempts to blend the best of town and country in the English "garden cities" of Letchworth and Welwyn. American urban designers[20] developed in the plan for Radburn, New Jersey, a prototype adaptation for the North American continent:

> [S]ubtitled . . . a "Town for the Motor Age," [it] included the superblock (the high density clustering of single, double, and multifamily housing around large areas of commonly held parkland), . . . the neighborhood principle . . . [of] Clarence Perry . . . ; the separation of vehicular traffic . . . ; and the development of a community organization . . . to administer the public lands; enforce restrictions, and supply . . . municipal services.
>
> (Brownlow, 1930, quoted in Birch, 1983:128)

---

[20] We can now address them as urban designers rather than architects. Although the Radburn team was led by the architect, Clarence Stein, "[t]he plan for Radburn . . . was not created in the traditional architectural manner. It reflected a multidisciplinary synthesis of the most current data and expert advice", (Birch, 1983:126). Even today, this would be unusual. Too frequently "planners are trained with little or no exposure to architecture; architects are educated with little awareness of urban planning", (Garland, 1984:4).

The three "Greenbelt Towns" of Roosevelt's "New Deal" era[21] followed the Radburn precepts, as eventually did the American new towns of the post-war era.[22] "Radburn's plan was so well designed and rationally organized that it has become a permanent resource for planners who in every generation examine and sometimes adapt it to solve contemporary problems . . . . It has survived as a testimony to the planners' vision of suburban growth", (ibid.).

The interwar years in Europe were different. The old continent had never entirely abandoned the Baroque, as witness, for instance, the Monument to Victor Emmanuel II in Rome (begun in 1885 and inaugurated in 1911), and the most grandiose example of nineteenth century urban design: Haussmann's Paris. Spurred on by events both political and architectural, it reached a new apogee in the twenties and thirties. The political revolutions in Germany, Italy and Russia pretty much followed Hoffer's three stages, beginning with inspiring ideologies and ending with grim authoritarianism. Meanwhile, similar events were taking place in architecture and urban design. In the late twenties and early thirties, the Modern Movement was in its heyday.

The Congrès International d'Architecture Moderne, (CIAM), with its stress on functionality, anonymity, standardization and mass production, had entered, (from their point of view, taken over), the field of city planning, for as the town-planning charter states, they believed that "only in the field of town planning will modern architecture find true expression and a wide field of discovery of new solutions", (quoted in Moholy-Nagy, 1969:266).

---

21 Greenbelt, near Washington, D.C.; Greenhills, near Cincinnati, Ohio; and Greendale, near Milwaukee, Wisconsin, (Wilson, 1983:119).

22 Reston, Virginia; Columbia, Maryland; Jonathon, Minnesota; Irvine, California, (Birch, 1983:132).

A prominent "new solution" was voiced by a leading protagonist, Le Corbusier: "We must kill the street .... We shall truly enter into modern town-planning only after we have accepted this preliminary determination", (quoted in ibid.,274,275). The authoritarian megalomania became even more evident a little later:

> The common effort at the hour of its birth comes from the hands of a single man who has accepted the responsibility: This man sends a message to the unknown, but to unknowns . . . he knows to be there . . . and to whom feeling and art are as necessary as bread and butter.
> (Le Corbusier, quoted in ibid.,276), (original emphasis).

The resurgence of design interest in the centre city we have lately seen on both sides of the Atlantic, (Gruen, 1973), had its predecessors in the rebuilding of the central areas of many British and European cities soon after the close of the Second World War. In North America, the precedent was set by Philadelphia, largely through the life-long commitment of its most famous Planning Director, Edmund N. Bacon.[23]

Although his name is associated with the reinforcement of the original classic arterial system of Penn's plan for the city and the three-dimensional design approach in general, (Bacon:1960), Bacon is best known for his plan for Penn Center, which replaced downtown elevated railroad tracks after they were removed in 1953. The most spectacular downtown initiative since the building of the Rockefeller Center in New York in the early thirties, it earned Bacon the international reputation that goes with being on the cover of Time magazine.

---

[23] Bacon was Executive Director of the Philadelphia City Planning Department between 1947 and 1970. Apart from two years in Michigan before this period, and his present work connected to his vice-presidency of Mondev International Ltd., a Montreal development firm, his entire professional career was spent in Philadelphia, (Barnett and Miller, 1983:5,6).

That was in 1964. Three years later, Bacon was to publish his manifesto, which spoke in architectonic terms of the Design of Cities. "My hope", he wrote, "is to dispel the idea . . . that cities are a kind of grand accident, beyond the control of the human will", (Bacon, 1967:13). Then, in words reminiscent of Burnham's famous admonition:

> Recent events in Philadelphia have proved [sic] incontrovertibly that, given a clear vision of a "design idea", the multiplicity of wills that constitutes our contemporary democratic process can coalesce into positive, unified action on a scale large enough to change substantially the character of a city.
> (Bacon, ibid.).

This was the high point of his career. One year later, in 1968, the Philadelphia magazine was to publish a photo of a crumpled version of his Time cover over the caption: "Ed Bacon's dream of the City Beautiful has turned out to be a nightmare". The old order was changing, leaving place to new ideas about urban design. Two years later, Bacon took an early retirement, (Barnett and Miller, 1983:4).

A decade has passed, and now the new role of urban design can be more easily discerned. No longer associated with the bulldozer techniques of urban renewal, and the megastructure "Dreams of Development" of the fifties and sixties, (see for instance, Toronto, 1984), today, urban design is seen as:

> one of the key instruments being wielded as the planning system maneuvers to cope with . . . the balancing of development costs and profitability, maintaining the value of private property, excluding unwanted externalities, facilitating social and economic linkages, allocating public resources judiciously, and so on.
> (Euston, 1981:34).

---

[24] Barnet and Miller, (ibid.), having the advantage of the perspective of time, have shed some doubt on the incontrovertibility of Bacon's proof.

Euston is referring to the fact that for a number of reasons, (the swing in the pendulum from the classic to the romantic being one), there has been a change in public taste, which has included a reassessment of the value of old buildings. And old buildings are not standard buildings: "Invariably these [buildings] are so particularized as to thwart the normal specifications of bulk, setback and height controls", (Waterhouse, 1983:83). Thus, one of the roles of today's urban designer is to act as a negotiator skilled in the manipulation of three dimensional space, working on a site-by-site basis; the work "conducted within a general policy [of] consolidating rather than transforming the structure of an area", (ibid.,82).

"Planning is the organization of differences, not the arrangement of similarities", said David Lloyd Thomas thirty-five years ago[25], and it seems he presaged the time when urban designers would be concerned "to comprehend the associations that underlie the geometrical expression of development so that, when manipulating the geometry, we can understand its influence on the economic and political behaviour of those affected", (ibid.,84). Yet there are other currents in the urban design stream.

For some little while, urban design opinion, discounting the discomforts of climatic extremes, have favoured the open street over the enclosed mall:

> [C]ertain elements of the pre-modern city such as the stringent pattern of streets and public squares, each systematically contained by flanking buildings, is now widely regarded as the correct prototype for determining the siting and orientation of new construction.
> (Jencks, 1980).

---

25 Professor Thomas was this writer's first year tutor in 1949-50, when he made this remark.

Evidently, urban design ideology has turned 180 degrees since Le Corbusier's pronouncements, some fifty years ago.

Moreover, in contrast to the Modernists' strict dogma that "form follows function", nowadays, it might as easily follow fiction, for we find the civic design work of leading architects like Charles Moore and Michael Graves' "is fanciful, reincarnating classical and even ancient stylistic references that symbolize lavish wealth", (Waterhouse, 1983:85). In this regard, there is no doubt that the pendulum has swung back to approach the taste of the turn of the century---the "patriotic classicism and cosmopolitan urbanism of the municipal art movement", (Peterson, 1983b:43). No wonder that at this moment, Cathy Berberian, noted singer of contemporary music, should revive the Victorian art song, and the Montreal Museum of Fine Arts should combine with the City of Paris and the Wadsworth Atheneum in Hartford to revive the fin de siècle, "pompier" art of William Bouguereau, (Glueck, 1985:H27).

Clearly, we are now in the midst of "Post-Modern" romanticism, thus the classic Modern movement is, in what Horsbrugh has incitefully called, "The Trough of Disregard", (Horsbrugh, 1965). It is fashionable to remember only the arrogance and insensitivity of the Modern school, as with the brilliant polemicist, Tom Wolfe, (1981), we compare the "Bauhaus to our House". As the quotations from the young Le Corbusier have amply shown, the movement had its megalomaniacs. But in our haste to jump on the Post-Modern bandwagon, we should not forget the quiet, honest sincerity of many associated with the Modern movement, who saw architecture as "a social art . . . not an academic exercice in applied ornamentation", (Richards, 1962:9), for when society has had a surfeit of romantic exuberance it will again be their turn.

The Classic-Rational Quadrant: The Planner as Administrator

The Rational-Classic quadrant of the Matrix of Planners we have called the quadrant of the Administrator. Recalling the images of Hoffer's authoritarian strong man, Henderson's demi-god and particularly Thompson's headman, who transmogrifies into the institution of "the State", it is evident that this is the quadrant that embraces both government and entrepreneurial activities.

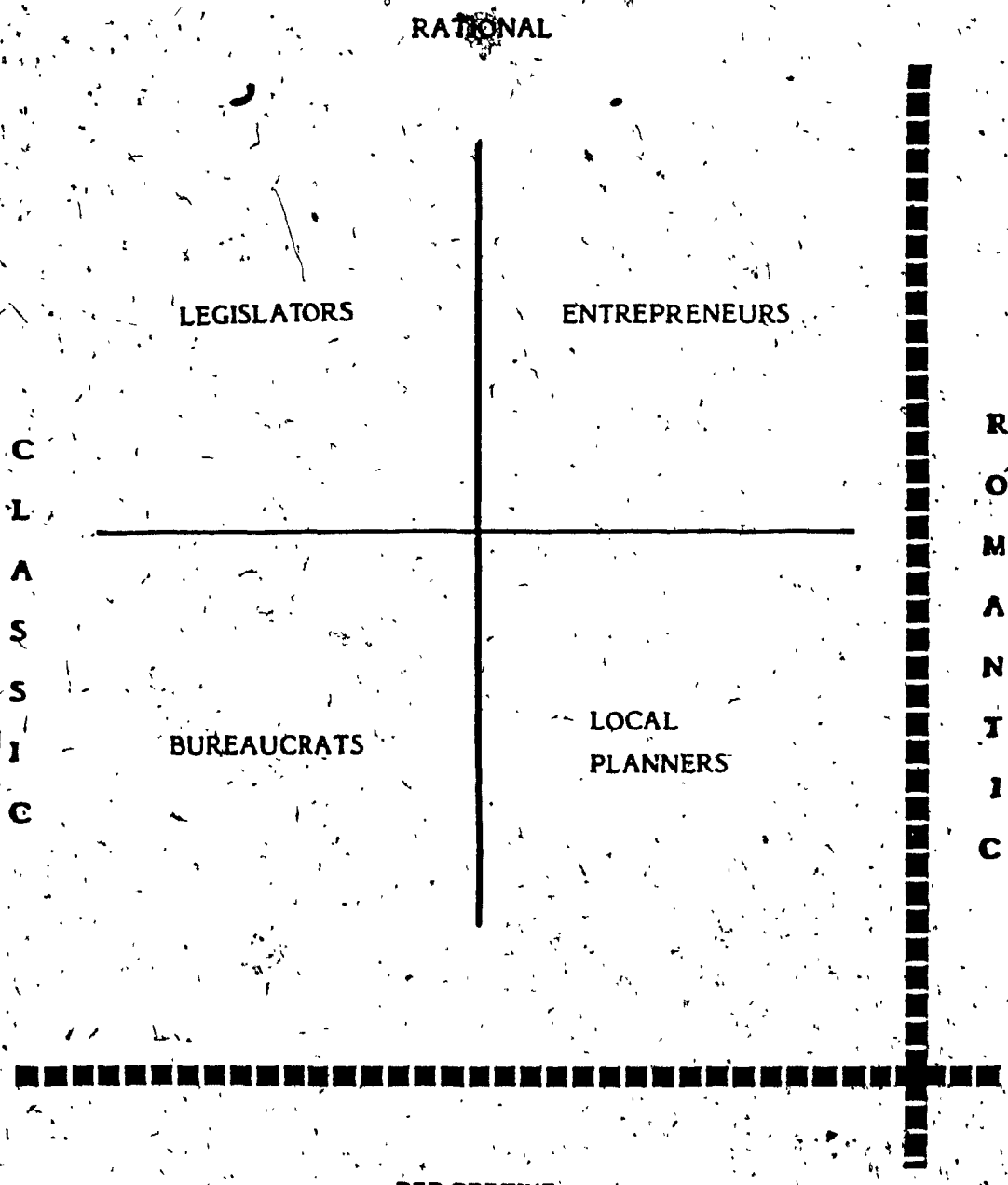
To some, these are the only planners, and for that reason, they are the target of many of their temperamental and world-view opposites, the romantic-feeling Reformers. These latter tend to lump together all rational-classic planners under the derisive title of "The Establishment", but their attacks might better find their mark if this quadrant was recognized, not as a monolith, but like the other quadrants, composed of a sub-system which includes quite different, and in many ways, contrasting elements.

The varied characteristics of those who occupy this quadrant are here highlighted under the rubrics of Local Planners, the Bureaucrats, the Legislators, and Entrepreneurs, (see Diag. 14). These titles alone evoke many of their varied characteristics, but in this context, they are certain features which bear elaboration.

Local Planners

Except for a brief flirtation with the idea during the era of the Ministry of State for Urban Affairs, (MSUA), there has never been a major effort to establish planning at the national level in Canada. As a governmental function, ever since the City Beautiful era (q.v.), planning has been recognized as largely a

Diagram 14 : The Quadrant of the Administrator



Position of quadrant in the Matrix of Planners

local responsibility.[26]

While it would be pure fantasy to suggest the state of local planning today is ideal, there are exceptions to the rule, some of which will be mentioned shortly. Hopefully the exceptional planners will grow in number in the coming years, as more and better-trained professionals work their way up the ranks. The training of many of the older planners now in command is not always up to standard. This may mean that many entering local government employment for the first time, full of university-inspired ideas and ideals, will be disappointed. Many old-guard local government planners share implicitly their employer's world-view, actually believing their role is "to justify the ignorance of the mayor", while others are on petty power trips themselves, (see Gerecke, 1976). Very often, as Sternlieb comments sadly, "The harsh reality . . . (of local government planning) typically consists of expertise in filling out the inevitable forms required for securing governmental funding, regardless of program", (Sternlieb, 1971:118).

Moreover, much local planning is affected by the decisions of what Clawson and Hall call the "specialist functional planner":

> Within the public sector there are highway engineers who make highways, medical men who make plans for hospitals, educational planners who make plans for schools and so on. Within the private sector, there are supermarket chain planners who make plans for new retail stores or central warehouse facilities, residential developers who plan programs of real estate building, and industrialists who plan extensions of their plant capacity or completely new plants. Whether . . . private or public . . . these planners are usually concerned with a single function, or a closely related group of functions. Although as part of their working environment they necessarily take

---

[26] In this regard, as in so many things, we have taken our lead from the United States, (see Catanese, 1974:16).

> account of the plans and programs of other public and private agencies and groups, they are not required to, and frequently do not concern themselves with the implications of their plans for those of others. Such men are 'specialized' in the sense that they are specialized in certain functions, but their specialty is not planning. They are likely to have somewhat different training, different professional histories, and, above all, differences in interest and objective as compared with the general physical planner. Though they may agree that they all gain by accepting the rules of the general planners, very often they will find themselves wanting to bend those rules. (Clawson and Hall, 1973:153).

No wonder Reissman (1964: 21) notes, in terms not dissimilar from those of McLoughlin's cited elsewhere, the planning practitioners' "inner compulsion to perform detailed rituals, by which, however, they are only dimly hopeful that they can find salvation". Hedman's cutting cartoon of the local planners' inadequacies in the face of rampant social change (Illus. 7) may be exaggerated, but not beyond its pointing to a certain aspect of the truth.

Reissmann, who refers to local planners as "Practitioners", shows himself understanding of other aspects---the essential ambiguity and powerlessness of their position[27]. His analysis is quoted at length, for though written in the mid-sixties, it remains relevant in many instances today:

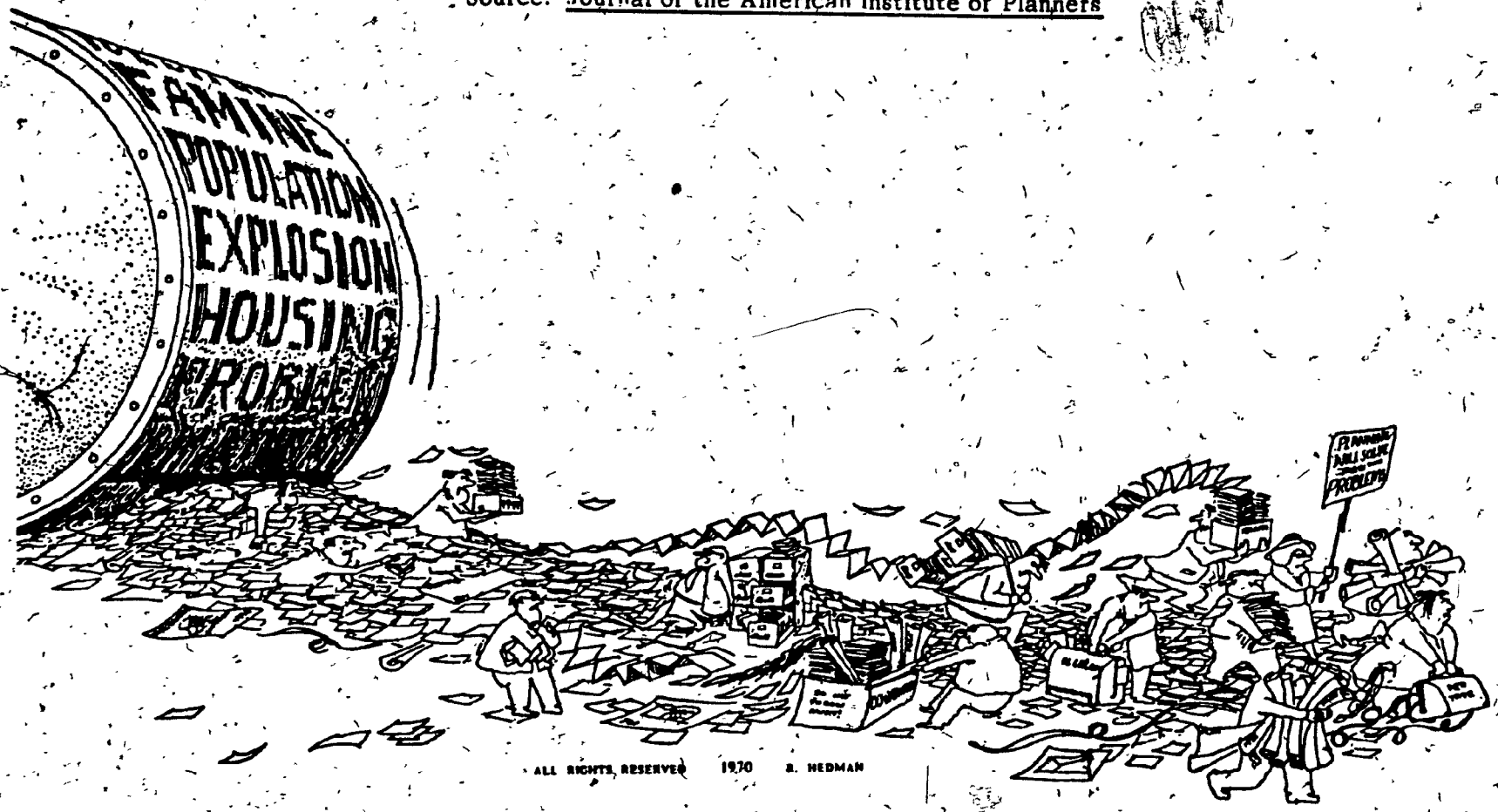
> Practitioners often are ambivalent, sincere men caught between the immediate demands of a job and their personal convictions about what needs to be done. [They] . . . must balance the idealism of their professional training against the realism of politics that defines their work. The long view must constantly be altered by the political demands of the moment, yet it must not be forgotten. It is impossible to plan radically under the daily pressures of local officials, realtors, businessmen, and neighborhood improvement associations, all of whom have a stake in keeping things as they are. If planners are to keep their jobs, they must be aware of the real economic

---

[27] See also Hungarian sociologist, George Konrad's The City Builder, (1977), for a literary image of the city planner's powerlessness, even in a society of "centralized reallocation".

ILLUS. 7: The Local Planner, according to Hedman

Source: Journal of the American Institute of Planners



> and political forces at work .... These opposing forces require that the city planner possess special skills to control them: indeed a good deal of his time is consumed in just that battle.
>
> The decisive feature of the practitioner's position is an almost complete lack of power to affect urban trends in any significant way. Confronted ... by consequences of previously unplanned actions, he is further restricted to a narrow range of possible steps he can take to solve the problems they have raised. It is not that he lacks judgement or knowledge; he lacks the means to do almost anything of positive and lasting consequence. As a government employee he is often prohibited from developing long-range plans designed to attack problems at their core. Government officials, dependent on the voter, are forced to show immediate and concrete results if they are to be returned to power, and this pressure molds the policy for the practitioner to follow. Pressured by party organizations, by business associations and by an aroused and discontented public, the practitioner is forced to act for the moment.
> (Reissmann, 1964:28, 29).

This sorry picture of planner powerlessness at the local level is by no means inevitable. There are current instances where despite the difficulties, progress has been made. In his work for the Greater Vancouver Regional District, Harry Lash has proven that advances are possible if one recognizes the importance of what he calls "the six-sided triangle"; his way of expressing the basic need for two-way communication between the planner, the politician, and the public. As he phrases it, "The Vancouver experience has convinced me that effective planning of human settlements in western democratic society will come to depend more on human relations in the process of arriving at decisions than it will on the planner's science and art of preparing plans", (Lash, 1977:12).

In his ten years as Cleveland's Director of Planning, Norman Krumholtz ably strove to go beyond the usual limits of his calling. "Ideology, environment, technology, power: These are the controlling factors in the history of planning", says Tunnard (1963), and for Krumholtz and his staff, ideology indeed heads the

list.[28] Distressed by the unfairness that springs from planning for efficiency alone, they planned to assure equity and justice as well. Heeding Davidoff's admonition, he literally brought advocacy within the established planning office. His style, far from being simply hortatory, was based firmly on a clear assessment of the facts, articulated in terms of ethical ends, and advocacy that spoke unerringly in defence of the majority of his constituency: the poor, (see Krumholtz; 1982:163-174).

The Bureaucrat

When one speaks of "the government", one is very often referring, not to an assembly of elected representatives in a provincial or federal parliament, but to a gargantuan institution known either as the civil service, or simply "the Bureaucracy". Planning at the local level is certainly bureaucratic in the general sense of the word, but true bureaucracy, i.e. government by bureaucrats, comes closer to reality at the level of the civil service--that shadowy superstructure, ostensibly serving the people as the executive servant of higher levels of government, but in actuality having considerable independence from the legislature, and power in its own right. One is in fact reminded of Mary Wollstonecraft Shelley's potent Gothic tale of Frankenstein's fabrication from human bits and pieces to be its creator's docile slave, only to develop a life of its own at its erstwhile master's expense. The analogy appears quite apt when one reads Walker's comments on Haines (1977) The Politics of Power:

---

[28] For an approach that put "power" at the top of the planner's list, see Jacobs, Allan B., (1978).

> The civil service in a modern democracy is far more today than a group of advisers serving altruistically and objectively a succession of masters of differing political stripe. They are in their own view, as one famous quotation has it, the tamers of the wild men, and no government . . . has been able to defeat them.
>
> Outside advisers . . . and an assortment of American presidents and British prime ministers, have not been able either to force their policies on a civil service when that service disapproved of them. Policies do change, but basic policies . . . have not been changed against the wishes of the permanent service. (Walker, 1977).

Of course all bureaucrats do not function as planners, but there are amongst them those who very definitely "link knowledge to action". Robert Moses was one such. While most bureaucrats are conventional and low-profile, Moses was an exception. Working at first with New York State Governor, Al Smith, and later with New York City Mayor La Guardia, his reputation for "getting things done" led in both cases to his holding multiple appointments at the same time. This, together with high intelligence, supreme self-confidence, and a strong dedication to serving what he saw as the public good, were responsible for his considerable prowess.

While it was beyond his powers, (and probably his interest), to plan in a truly comprehensive manner, his multiple posts did allow him to plan "unitedly"; combining road, parkway, park, and recreation projects in ways that otherwise would have been impossible. Considering himself an action-oriented "realist", he gave no quarter to the idealistic visionaries of his time, who "dreamed more than they built"; publicly villifying them as "the vestal virgins of long-haired planning" because they accused him, (not altogether without reason), of being a simple tactician instead of a bold strategist, (Wilson, 1983:103-109).

Max Weber's recognition of the bureaucracy as an entity in some ways

distinct from democratic government goes back many years. Compared with "any collegial form of administration or . . . any conducted by honoratiores or part-time administrators", he sees it as benign and beneficial, (Rheinstein, 1967:349). Ultimately, Walker comes to a similar conclusion:

> The fact that the power exists and is used by the non-elected segment of government is not necessarily to the discredit of that segment. It reflects as much the incredible complexity of modern administration, and the inability of . . . an elected government, essentially amateur in nature and temporary in position, to handle the job.
> (Walker, ibid.).

However, Mannheim, (1940:47) writing soon after escaping from Germany, feared the development of "an almost caste-like bureaucratic order"; mediator between conflicting social groups and ally to certain classes, he sees the bureaucracy as a potential tyrant with monopoly control.

Though Robert Moses was too much an extravert individualist to create a "caste-like order", his choice of, and the way he applied his solutions to the problems of New York appear close to tyrannical, and he undoubtedly favoured the middle class, (with whom he identified), over all other classes. It was of no consequence to him that he disturbed the tranquility of the very wealthy when he pushed public roads through their Long Island estates. And while the poor in Harlem might eventually get a park, he made no concessions to their special circumstances and needs, (Wilson, ibid., 105, 106).

A generation after Mannheim's lugubrious warnings, Heilbroner (1976:32), took up his theme to postulate a similarly ominous future, when the Bureaucracy would detach itself from elected government, to become the primary force to sustain a much-changed neo-capitalist economy. While not ruling out this kind of scenario entirely, it should be noted that the public has shown itself capable of

reacting, (if not over-reacting), to this kind of threat to our democratic principles, as witness since Heilbroner's prognostications, the recent trends in the Western world toward curtailing the growth and powers of large bureaucracies, and active moves in a number of countries, to favour "privatization". Notwithstanding, the likelihood of elimination of bureaucratic planners entirely seems very remote. We can safely retain them as continuing to remain an important type of planner.

The Planner as Politician

Recently planners have been admonished to get involved in politics. Donnison argues thus: "Since it is centrally concerned with the allocation of resources and access to opportunities, planning is a political process: government---its legal powers, administrative structure and political culture---forms the mould in which it is cast. Thus planners must be alert to the constraints imposed on their work and thinking by the constitutions within which they operate and be prepared to seek changes in these systems of government when necessary", (Donnison, 1973:93). This is not the traditional stance, however. From the beginning, the planner adopted a "hands off" attitude to direct involvement in the political process. Here is how Catanese expresses it:

> [T]he roots [of professional planning] are tenuous. They are planted in a field of muckraking and utopianism which held that common people did not know what was best for themselves and that politicians were cunning devils bent on deception and corruption. The early planning movement grew out of reform activism coupled with a noblesse oblige [sic] of the concerned intellectuals and elite of the day. From its inception, planning as a profession was shielded from the evils of the political system .... Thus arose the ... dichotomy of planning: planners ... shielded from the elected representatives of the people.
> (Catanese, 1974:16).

This fact, Catanese believes, is one of the major causes of the ineffectiveness of planning, and others join him in this opinion. Lash, pleading for planners to make the effort to understand politicians and the difficulties of their role better, insists that "most are in the game not just for the power and action. In addition, they believe they can do some good for society .... (M)ost politicians, even as you and I, have mixed motives", (Lash, 1974:79).

As previously mentioned when discussing the Local Planner, Lash calls for more, and sustained dialogue between planners, politicians and the public, (ibid., 11-15). Catanese takes this theme one step further, in his belief that planners and politicians (and thereby the public), can gain much by actively tempering their weaknesses by emulating each other's strengths and virtues, (ibid.,125-157). From here, it is only another short step to suggest that there is room for those trained as planners to join the politicians themselves. Politicians "have only a limited policy knowledge, very few of them having received an education in any relevant discipline other than law", (Dror, 1968:248). In contrast, the planner's curriculum, however imperfect, does equip the practitioner more than most with a combination of "systematic knowledge, structured rationality, and organized creativity" that Dror, (1971:17), sees as characteristic of the ideal policymaker.

For the time being, the number of legislators with planning backgrounds is limited, both in Canada and in the United States. In this country, the one with the highest profile, if not the highest accomplishments as a planner, is Lloyd Axworthy. Axworthy left his position as Director of the School of Planning at the University of Winnipeg, to become member of parliament for a Winnipeg constituency; latterly, he was Minister of Transportation in the last Trudeau government, and a member of Cabinet. Lash, (ibid.,70), mentions Bob Williams,

Minister in the former NDP government of British Columbia, as also being a planner.

In the United States, three members of the American Institute of Certified Planners, (AICP), ran for election in the 98th Congress in 1982: Marcia Kaptur, (D-Ohio), Douglas Bereuter, (R-Neb.), and Michael Carroll, (R-Ind.). Kaptur and Bereuter, who both won seats, (APA News, 1982:1), later confirmed the advantages of planning training in carrying out their duties in the Legislature, (White and Schamberg, 1984).

Although Carroll lost his bid for a Congressional seat, he was no stranger to public office, having been Deputy Mayor of the City of Indianapolis from 1968 to 1976, (APA News, ibid.). As such, he is representative of numerous[29] North American planners elected to local councils. Carroll got his start as Special Assistant to a senator, but the pattern is very often one where Advocate members of local pressure groups decide they can put their planning training to greater use if they are themselves elected to office.[30]

The Entrepreneur-Planner

The conventional image of those involved in the business of land development is that of crass profiteers amassing great fortunes at the expense of the public and the inner-urban or ex-urban environment. For the most part, such

---

[29] The actual number is hard to gauge, as the matter seems so commonplace that it is not considered newsworthy. Only passing reference is made from time to time in the professional press, (as in the case of Carroll, cited above).

[30] As local instances, between 1978 and 1983, Jo-Anne Issenman, a graduate planner, sat on the Westmount City Council, and last year, this writer ran (unsuccessfully) for a seat on the same Council. Both Issenman and the writer had previously led local pressure groups.

an image is almost certainly exaggerated,[31] and while there are indeed villains that fit the stereotype,[32] there are, at the other extreme, those in the land development business who exhibit an exemplary interest in upholding the principles of good planning as well as making a profit. These are amongst those we have called here, the "Entrepreneur-Planners".

James Wilson Rouse is the multi-millionaire founder of one of the world's largest real estate development and management firms. Referred to in a Time magazine cover story, (Demarest, 1981:36-42), as a "master planner" and "urban visionary", he is recognized here as a prime example of the Entrepreneur-Planner. Starting in the fifties as a suburban regional shopping centre developer, he has latterly realised, as he puts it, that "the task of making the American city a fit place to [sic] grow our people is the N° 1 priority of our civilization", (ibid.,40). With this in mind, he has turned his attention to rehabilitating neglected in-town areas within what Nader has called "the zone of discard", (Nader, 1975:104), of a considerable number of cities.[33]

But perhaps what his firm is best known for is the planning and development of Columbia, Maryland. This 22 square mile new town for a population of some 60,000 is an Americanized version of the British garden cities

---

31 Conventional wisdom on this point is questioned by such as Baxter, (1975:322-327).

32 As witness the meticulous research of Limonchik, (1982:179-206), and Deachman and Woolfrey, (1982: 301-344), relative to the operations of the Campeau Corporation.

33 Boston, Philadelphia, Santa Monica, Baltimore, New York, Milwaukee, St. Louis and San Francisco, (Demarest, ibid.).

and new towns, which addresses itself, with some success, to three major goals: preserve the natural beauty of the terrain, provide a range of housing for a variety of social groups, and create jobs within the community, (Demarest, ibid.,41). Latterly, Rouse has pursued social concerns even further by setting up a nonprofit foundation to concentrate on what he recognizes as "the crucial necessity for inventing new processes, new systems for dealing with [the] social needs . . . [of] the very poor", (ibid.,43).

Rouse is by no means alone, nor the first Entrepreneur-Planner. Perhaps the most spectacular example of entrepreneurial planning took place in the first decades of this century, when the Commercial Club of Chicago first initiated, then sponsored Daniel H. Burnham's "Plan of Chicago". Their presentation of the Plan to the City in 1909 brought about the formation of the Chicago Planning Commission and the beginning of long range, comprehensive planning in North America. The Club's interest in the Plan did not end with the gift of the Plan, however. For over a decade, the Commission was largely financed by the Club, (Wrigley, 1983:60): "[I]t was the Commercial Club, with its many distinguished and powerful personalities, and not the city, that enthusiastically pushed the plan during this period", (ibid.,65); not, it should be noted, through the crude wielding of power, but by an active and innovative program to win broad citizen support, (ibid.).

In the late twenties, the precedent of direct entrepreneurial risk-taking to further planning principles can be seen in the development of Radburn, N.J.. This planned community, "so well designed and rationally planned that it has become a permanent resource for planners", (Birch, 1983:122), was sponsored by a wealthy New York entrepreneur, Alexander Bing, (ibid.,125). Over the last

dozen years some seventy-five planned communities have been developed in North America[34], (Galantay, 1970:171), of which several are, like Rouse's Columbia, relatively independent new towns. These include Reston, Virginia; Jonathon, Minnesota; and Irvine, California. All resemble Radburn in a number of ways, (Birch, ibid.,132-137), not the least of which is their being built by private enterprise, (Galanty, ibid.), as opposed to public development usual in Britain and Europe.

We have outlined, above, the entrepreneur as planner, but it is also possible to see within the Entrepreneur-Planner category, the kinds of planner who are developing entrepreneurial skills to attract or persuade developers to build in certain areas crucial to planning interests, and in ways that respect planning and urban design principles. Since the mid-seventies, Andrew Euston, an official with HUD, (The U.S. Housing and Urban Development Administration), has been proselytizing to get the idea accepted of a "new profession"---"Urban environmental design administration". Although similar to the usual kind of planner in their emphasizing process, urban environmental design administrators are not tied to a particular planning agency, and as long as they are able to implement urban decisions, may come from a variety of backgrounds.

Euston offers as an example of this kind of administrator, Weiming Lu, Director of Lowertown Redevelopment Corporation, a non-profit corporation created by the city of St. Paul, Minnesota, in 1978. Lu actively "searches out developers, helps them finance projects, and exercises an informal sort of design

---

[34] A local example is the planned community on the Ile des Soeurs, Verdun, Qc.; Don Mills and Erin Mills are examples in the Toronto area.

control.... The result today is some $200 million in investment with 25 projects completed or underway", (Knack, 1984:7).

A final variation on the theme: the entrepreneur who becomes a planner. Jacques Simard, founding member of la Corporation des Urbanistes du Québec[35], early President, and long elder statesman of the Community Planning Association of Canada, became a planner because of a combination of family responsibilities and interest in good design. As the eldest son, he was responsible for the family estates on the south shore of the St. Lawrence, south of Montreal. These responsibilities became onerous in the 1940's and early 1950's, when the provincial government decided to built a new bridge to cross the St. Lawrence river as a link with the Eastern Townships autoroute, then at the design stage.

The Simard property was right in line with this bridge, and development of what had largely been farmland was not only inevitable, but imminent. In those days there were no professional planners practising in Québec; businessmen in Simard's position hired an arpenteur géomètre to make a legal, if unimaginative subdivision. Simard was not satisfied with this solution. Having heard of the new planning program being offered at Harvard University, he decided to make a mid-career switch and enrolled. Thus he was able to personally oversee the planned development of his family's property. Latterly, as partner in the consultant firm of Sunderland and Simard, Inc., Simard continued practising as a planner until his retirement.[36]

---

[35] Now La Corporation Professionnelle des Urbanistes du Québec.

[36] The facts of this somewhat unusual case were related to the writer by M. Simard, ca. 1970, when he was Chief Planner for Sunderland and Simard.

The Rational-Romantic Quadrant of the Synthesizer

As we approach the end of this analysis of the types of planner, let us recapitulate: the Matrix of Planners reveals four basic types---the Romantic-Perceptive Reformer, the Classic-Perceptive Systemizer, the Classic-Rationalist Administrator, and the Rational-Romantic Synthesizer. The Romantic-Perceptive planner is impelled by idealism; the Classic-Perceptive, by an urge toward a stable and static systemization. As social scientists, Systemizers deal with knowledge; as designers, with the material world. Classic-Rationalists seek too for order, but through governance, while the Romantic-Rationalists of this, the last quadrant, are seeking ways to establish societal homeostasis, by improving what Friedmann, (1969:31), calls, "societal guidance system performance"---simply stated, the planning of planning.

"When the rate of social change increases steadily while our control over change appears to decrease, we perceive the times as turbulent", (Godschalk, 1974:1). As the social ecologists who originated the expression in this context[37] later describe the phenomenon, "dynamic field processes emerge as an unplanned consequence of the actions of the constituent systems", (Emery and Trist, 1974:52). In other words, "Turbulent environments may be regarded as complex and rapidly changing fields of interaction in which the participant actors produce unforeseen negative consequences for themselves", (Friedmann, 1969:318).

---

[37] The term "turbulent" applied to societal situations, appears to have originated with Emery and Trist, (1965). First recognized in the planning field by Friedmann, (1969:316), its meaning and significance have been pursued by Friedmann and Hudson, (1974), and contributors to Godschalk, (1974), Morley, (1981), and Hightower and Rashleigh, (1981). See also Beer, (1974) and Drucker, (1981).

Stafford Beer's metaphorical explanation of the nature of this turbulence is that ever-increasing "oscillations of change" develop because there is not enough "relaxation time" between major systemic perturbations, thus rendering the system inherently unstable, (Beer, 1974:11,12).

The classic mind, with its confirmed belief in conformity to a static order, will react to turbulence in one of two ways: it will either seek to bring back stability through a rigid enforcement of controls, (see ibid.,6) or it will endeavour to "remain detached from the turbulence; waiting for it to subside into stability, so that proven planning methods and theories may again be effective", (Godschalk, 1974:1).

Rational-Romantics reject both these responses; the first, because it is overtly offensive to our basic societal values; the second, because it no longer appears a feasible course of action. They instead search for a strategy that will afford a dynamic equilibrium; one that will allow us "to plan from within the turbulence; trying to understand its unfamiliar order while building new methods and theories appropriate to the changing conditions", (ibid.). Bolan expresses well, this romantic, indeed openly anti-classic approach to theorizing about the planning process:

> The social world of the future will require the intelligent guidance of turbulence, rapid change, and complexity if it is to avoid oppression and want . . . . [It] cannot permit the reifying oppression of static social science and its highly objectified products. Systems of values, symbols and roles are demanding their place in a theory of planning. The social world of the future will require humanistic institutions . . . designed around collaboration and reason rather than coercion and fear.
> (Bolan, 1974:30).

There are, predictably, four quite different types of planner operating within the scope of romantic rationalism, who are contributing toward fulfilling

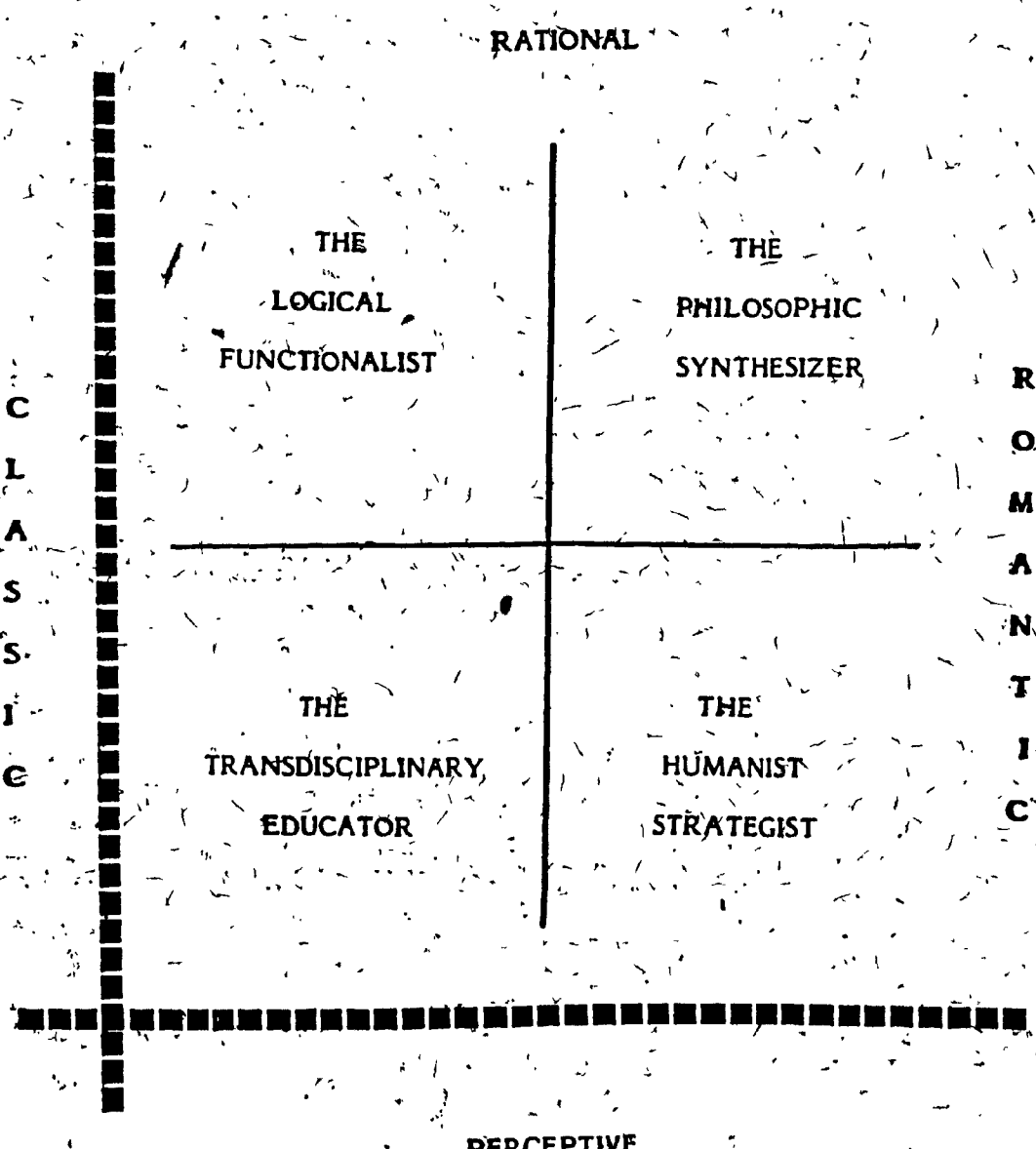
these complex aims, (see Diag. 15).

In reviewing current planning process theory, Friedmann and Hudson, (1974:3), distinguish between four intellectual traditions in planning: philosophical synthesis, rationalism, organization development and empiricism. Apart from empiricism, which is clearly primarily a tool of "static social science" and therefore part of the Systemizers' stock-in-trade, the other three techniques can be readily appreciated as the tools that distinguish three of the four types of Synthesizer. These latter are identified here, respectively, as the "Philosophic Synthesizer", the "Logical Functionalist", and the "Humanist Strategist". The fourth type of Synthesizer, (not recognized by Friedmann and Hudson), practices in the world of planning education. Particular interests and concerns in the field suggest the name of "Transdisciplinary Educator".

Philosophic Synthesizers concentrate particularly on bringing a sense of wholeness to planning. Innovative and interdisciplinary in approach, they treat planning as a social process. All "pose the issue of conflict between individual and societal perspectives on planning problems", (ibid.); for instance, the question of freedom of the individual in a social context. They are also concerned with "the larger historical context to which planning responds", and demonstrate "normative and prescriptive concerns and... the tendency to assume explicit value positions", (ibid.).

Logical Functionalists tend to be concerned predominantly with how to make decisions more rationally. For them "the model of man... is that of a utility-maximizing being whose relations to other men are defined in purely instrumental terms", (ibid.). Whether interested in decision theory or policy science, their favourite tools are the computer and the mathematical model, and

Diagram 15 : The Quadrant of the Synthesizer



Position of quadrant in the Matrix of Planners

their favourite scale, the metropolitan area.

In contrast, Humanist Strategists are concerned primarily with "organization development". For them, "planning is not . . . an intellectual process of efficiently adapting means to given ends, but . . . [is] primarily a method for inducing organizational change", (ibid.,10). For the most part, their working hypotheses are at odds with those of the Logical Functionalists, for "nothing could be greater anathema to a rationalist than . . . [the Humanist Strategists'] "messy" admixture of scientific ethos and normative enthusiasm", (ibid.,11).

Like the Romantic-Perceptive Anarchists, reviewed earlier, the Humanist Strategists are "change agents", usually acting as catalysts to small groups on a face-to-face basis, in this case, most frequently within organizations. Frankly experimental, their chief tool is dialogue. Nevertheless, there are also those who, like Stafford Beer, blend the principles of the humanist with the tools of the cyberneticist to serve national and international communities, (see p. 11n).

Lastly, a particular kind of planning educator deserves a place in this quadrant of the Matrix of Planners. All other types of planner will be found on the staffs of planning schools, as specialists in particular modes of linking knowledge to action. But ideally at least, the program directors should be linking all these kinds of specialist knowledge to the teaching activity in an unbiased fashion. It follows that they should not be prejudiced against any type of planner, and be able and willing to integrate their various contributions into the curricula. How otherwise are we to divert the trend toward increasing alienation within the profession ? This, of course, is to return to the point that initiated this dissertation.

Having introduced all four types of Synthesizer, it is now appropriate to review in more depth, the contribution of each type to the Matrix of Planners.

Chart 4 indicates the breadth of Friedmann and Hudson's coverage of the three Synthesizer types with which they deal. With over forty entries, (backed up with over one hundred references), their erudition is unquestionable. This does not mean, however, that their synopsis, impressive as it is, is beyond criticism. There are a few puzzling oversights important enough to bear mentioning here. For instance, Sir Patrick Geddes, (1968), is surely a Philosophic Synthesizer of pivotal importance, since he can be said to have been the first to have propounded the principles on which the modern practice of urban and regional planning is based. Furthermore, the fact that they perceive the translation of the organization development studies of the Humanist Strategist, from the corporate to the societal scale, as "extraordinarily difficult", may spring from their overlooking the work of Friend and Jessop, (1969), and Stafford Beer, (1959, 1974); the first working at the municipal level, the latter at the national and international scale, (see p. 11n). To make good these omissions, all four will be referred to in the appropriate sections that follow.

The Philosophic Synthesizer

Within this century, there have been two world wars, as well as numerous, less all-embracing conflicts, which, nevertheless, have involved significant parts of the globe. But these periods are not our concern here, since total war leads to total subordination of all values to winning the war. Of necessity, planning becomes coercive, oriented as it is to this single objective. As such, these times,

Chart 4 : Authors related to Three Synthesizer Types

Source: Friedmann, John, and Barclay Hudson, (1974), Table 1: "A Synoptic Guide to Major Traditions in Planning Theory"; pp. 4,5

N.B. Names in capitals do not appear in the original, and are added by this writer.

Date (approx.)	Philosophic Synthesizers	Logical Functionalists	Humanist Strategists
1890	Sir PATRICK GEDDES		
1930	Karl Mannheim F. von Hayek		Chester Barnard
1945	Barbara Wootton Karl Popper		
1950	Robert Dahl and Chas. Lindblom	Herbert Simon Kenneth Arrow Jan Tinbergen	Kurt Lewin
1960		James March and Herbert Simon George Miller Eugene Galanter and Karl Pribam Jan Tinbergen Chas. Lindblom	Ronald Lippitt Jeanne Watson and Bruce Westley STAFFORD BEER W.Bennis, K.Benne and R. Chin (eds.) Chris Argyris Warren Bennis
1965	Amitai Etzioni	Olaf Helmer R. Bauer (ed.) David Novick (ed.) R. Bauer and K. Gergen (eds.) C.W. Churchman Erich Jantsch (ed.)	Paul Lawrence and Jay Lorsch Rensis Likert Garth Jones Edgar Schein J.K. FRIEND and W.N. JESSOP
1970	C.Hampden-Turner Edgar Dunn Donald Schon John Friedmann	Harold D. Lasswell Yehezkel Dror C.W. Churchman IRA M. ROBINSON (ed.)	STAFFORD BEER HARRY LASH

as harrowing as they may be, are not perceived as "turbulent", since conditions, however negative, are considered transitory, shortly to end in the euphoric world "when the war is won".

Turbulence is perceived only when expectations can be higher and more diffuse than during wartime, that is, when "normalcy" seems a reasonable expectancy. Normalcy seems often to be associated with a steady state and with predictability, though these conditions tend to be appreciated more in retrospect and prospect than in experienced reality.[39] There have been three particularly tumultuous periods (other than wartime), during this century alone: the turn of the century was an age of vast social and environmental change; the Great Depression years of the thirties, with the concomitant rise of totalitarianism in Germany, Italy, Russia, and Japan; and our own period of economic "stagflation", energy crisis, environmental brinkmanship, social unrest, mass starvation, and threats of "Star Wars" escalations in the Russo-American confrontation.

These considerations are in context here because, paradoxically, social turbulence seems to generate the formation of Philosophic Synthesizers: "Each crisis called forth a small number of thinkers who, trusting in the self-transcending powers of a disciplined imagination, endeavored to chart a new direction for societal guidance and planning", (Friedmann and Hudson, ibid.,6).

The turn of the century spawned the first philosophic synthesizer of importance in the profession, Sir Patrick Geddes. A Scot who studied biology

---

[39] Several correspondents in the "Planners' Forum on Turbulence", (Hightower and Rashleigh, 1981), seemed to suggest that a certain degree of turbulence, (appreciated as "change"), is more the norm than the steady state.

under Thomas Huxley, Geddes[40] derived from Auguste Comte, the idea of interdisciplinarity, (Coser, 1971:9), and of applying an evolutionary method to the study of institutions and cultural forms, (ibid.,7); from Frederick Le Play, he borrowed the idea of the three interactive components of the community: "place, work, and family", (Goist, 1974:32), (the last of which, he changed to "folk"), and "the process facts of memories, plans, and acts", (Bell, et al., 1973:75). Moreover:

> Geddes was the first scholar in the English-speaking world to recognize the city as an essential organ in the development of civilization: and a whole generation before Toynbee introduced his concept of 'withdrawal and return'--- Geddes analyzed the function of the 'cloister'---in the modern form of laboratory, studio, library---as necessary for raising the creative potential of the city; while in his advocacy of the 'university militant', he anticipated the current concern of university students to make the university play a responsible, dynamic part in the improvement of urban and regional life.
> (Mumford, 1974:442).

Geddes' interests were broad. He established the Outlook Tower in Edinburgh---"a new type of sociological museum as a center for new sociological, civic and regional studies", (ibid.). He pioneered slum rehabilitation, the redemption of small open spaces as public gardens cared for by volunteers, and the building through private investment of a series of student hostels. He planned the Edinburgh Zoo, Tel-Aviv as a new garden suburb to the then larger Jaffa, (see Sharon, 1951). In his sixties, he spent ten years in India writing reports for some fifty Indian cities and towns, (Goist, ibid.,33; Tyrwhitt, 1947).

---

40 We have already introduced Sir Patrick in the guise of a pioneering Observer and field worker, (Tyrwhitt, 1947). Notwithstanding the precedence of other pioneers, such as Engels, Booth and Marx, in some aspects of his work, (Wolfe, 1981), he merits his position here as well, by virtue of his particular synthetic contributions to the philosophy of planning.

"In his earlier proposals for the social, agricultural and economic rehabilitation of Cyprus, Geddes again led the way in making a comprehensive ecological diagnosis of problems usually treated in specialized compartments", (Mumford, ibid.).

But all this diverse activity might simply indicate the work of a resourceful and energetic "jack-of-all-trades". His claim to the title of Philosophic Synthesizer comes from his recognition of the essential oneness of all elements of his work:

> Geddes was [one of] the first to understand the organic interdependence of city and region as the basic geographic and historical structure underlying the complex interaction of place, work and people, and of educational, aesthetic, and political activities .... Geddes was the most effective proponent of the idea that a systematic firsthand survey should precede all planning; and in such a survey he regarded personal experience, through walking and talking and contemplative absorption, utilizing all senses, as no less important than the systematic gathering of geographic, climatic, demographic and economic data: indeed more important, since only by this means could the mind embrace urban needs and functions as a dynamic, unified whole .... As against authoritarian formalism and technocratic planning, Patrick Geddes stands preeminently as the exponent of organic planning, through which all the functions and purposes of the city may be cumulatively realized in appropriate structures, conserved, renewed, or when necessary replaced and creatively enlarged through the city's continued self-metamorphosis.
> (Mumford, ibid.).

For Friedmann, Karl Mannheim stands out as the Philosophic Synthesizer of the period preceding the Second World War[41]. He devoted a whole chapter in

---

[41] A distinction might be made here regarding the change of mood that can be detected between Mannheim's Man and Society in an Age of Reconstruction, (1940), and his Freedom, Power, and Democratic Planning, (1950). Friedmann's high opinion of Mannheim is based on his understanding of the earlier volume, which he believes, "(i)n the light of present conditions in America . . . gains new relevance", (Friedmann, 1973:274). The latter,

his Retracking America, (1973:22-48), to draw our attention to Mannheim's "pathbreaking explorations into the processes of societal guidance". Friedmann attributes to him the invention of the idea of "society as a self-organizing and learning system", regarding planning in this sense as "the culminating stage in an historical evolutionary process", (Friedmann and Hudson, ibid.,6).

The key was thinking comprehensively---what Mannheim, (following Max Weber), distinguishes as "substantial" as opposed to "functional" rationality. Functional thinking was the province of the expert. "Specialized knowledge was required to make the system work efficiently . . . but the price of greater efficiency was a loss of intelligent insight into complexity . . . . More and more people seemed to know less and less, errors multiplied, and national economics were speeding down the track to disaster", (Friedmann, ibid., 29).

Substantial rationality, Mannheim defines as:

> intelligent insight into the behavior of complex systems . . . [leading to] an understanding of the working of the social system both as a whole, and in its multiple meanings and ambiguities, to the discovery of the forces underlying its dynamic behavior, thus to grasp its direction. Substantial rationality was concerned with ends of action, in the same way that functional rationality was focussed on the means . . . . By thus relating the concept of rationality to processes of societal

---

written after Hungary, Mannheim's birthplace, had been overrun by the Russians; is for Wolfe, (1981), flawed by an antisocialist, pro-middle class bias. This view coincides with Floud's, that the later Mannheim emerges "as a utopian of the right, seeking the security of an integrated society grounded in a common morality inculcated through education", (Croser, 1971:447). Friedmann himself refers euphemistically to this later volume as being "more attuned to the Anglo-Saxon temperament", (ibid.), and does not include it in the bibliography of his review of the literature, (Friedmann and Hudson, 1974:15). In any event, the matter lies at the periphery of our interest here, since our central concern is to establish the veracity of the Matrix of Planners, typology, and the place of the Philosophic Synthesizer in it. Whether Friedmann's admiration for Mannheim is well-placed or not, relevant as it may be in itself, is not at issue here.

> guidance, Mannheim set the terms in which the theory of planning was to be discussed for a generation. (Friedmann, 1973:30,31).

During the closing years of the second World War, the Austrian philosophers, Friedrich von Hayek and Karl Popper, (by then both living in England), propounded their "conjectures" concerning the "Open Society", contrasting sharply with the centrally planned society of Karl Mannheim and the English economist, Barbara Wootton, (Friedmann and Hudson, ibid.,6). As for the fifties, a period of relative growth and prosperity, there were exceptions to prove the rule of Synthesizer-crisis symbiosis in the shape of Dahl and Lindbloom's exposition of their choice theory. Published in 1953, it is considered important enough for them to be listed as Philosophic Synthesizers, (ibid.).

Similarly, Amitai Etzioni earns our informants' accolade by virtue of the fact that his Active Society, (1968) alone predates and foreshadows the latterday discussion of Mannheim's "learning society" as an antidote to turbulent times, proposed by the "new wave" of humanism associated with Hampden-Turner, (1970), Dunn, (1971), Schon, (1971), and Friedmann (1973) himself, (Friedmann and Hudson, ibid.,7). "In effect, the new humanists outlined the ways in which a decomposing postindustrial society might change itself into a self-organizing, negentropic learning system", (ibid.).

The Logical Functionalist

As the name implies, the Logical Functionalist's major concern is to find how decisions can be made more logically. Again, we lean on the erudition of Friedmann and Hudson. Speaking of their approach as being in the "Rationalist" tradition, they recognize the Logical Functionalist's model of Man as being:

> that of a utility maximizing being whose relations with other men are defined in purely instrumental terms. A decision (usually about the proper allocation of resources) will be called rational when it arrives at a single 'best' answer to a stated problem. Decision theory is, therefore, attempting to state the rules of logic and practice, which lead . . . to an optimal solution to a problem. More recently, rationalists have pushed their thinking beyond decision theory into 'policy science' a field of expert analysis where new social technologies are applied to problems of strategic decision in the central guidance of social systems.
> (ibid.,3).

A compendium edited by Ira M. Robinson (1972), is cited by Friedmann and Hudson, (ibid.,8), as indicative of the continued interest in logical functionalism. In his preface to this anthology, Harris describes its approach as following "a well established paradigm of the planning process . . . [which] requires the setting of goals, the formulation of alternatives, the prediction of outcomes, and the evaluation of the alternatives in relation to the goals and the outcomes", (Harris, 1972:8).

Friedmann and Hudson move quickly on, to comment at some length on the literature of decision-making and policy science, (ibid.,8-10). Rather than follow their lead, it seems preferable for our present purpose to stay with a contributor to the Robinson anthology, J. Brian McLoughlin, to examine his approach to the field of planning in more depth; it being in many respects typical of that of the Logical Functionalist.

Not that McLoughlin's background is typical. In the first case he is British, while the approach was pioneered particularly by Americans. Secondly, he is unlike the majority of his fellow Logical Functionalists in not being initially trained as an engineer, an economist, a statistician, or in like fields which

depend heavily on mathematics and computer literacy.[42] Yet there is no doubt that the mathematical approach is as attractive to him as the aesthetic approach of the urban designer is anathema. In point of fact, it was his distaste for the urban design approach to planning, (still prominent in Britain in the late sixties), that prompted him to write a manifesto for a "new" approach, (McLoughlin, 1969).[43] In his preface, he generalizes his own misgivings thus:

> (V)ery serious doubts have begun to arise---not only about the effectiveness of the means for planning, but much more fundamental doubts about the ends which institutionalised planning is supposed to serve, about the nature of the process as a whole, about professionalism, skills and education. (McLoughlin, 1969:15).

The turbulence of the times was calling for a sharp change in the direction in which (British) planning had been heading. For McLoughlin, the response was unhesitating: "(W)e are dealing with a complex and probabilistic system in which changes in activities, the spaces which accommodate them or in communications or their channels, result in repercussions which modify the system", (ibid.,92). "(D)eliberate control of the man-environment relationship must be firmly based on a system view . . . . (C)ontrols cannot be simple . . . , (they must be) subtle and persuasive . . . (i.e.) cybernetic, (ibid.,94,95), (emphasis in the original). Thus to Logical Functionalists, all aspects of human life

---

42 McLoughlin graduated from the Honours Town & Country Planning program at King's College, Durham University (now University of Newcastle-on-Tyne), in 1954. The program included courses in these subjects, but no more. As the computer did not come into use in the field of planning until the sixties, he is self-taught in this regard.

43 In a private conversation with this writer, McLoughlin made it clear that an influx of architect-trained South African planners in the late sixties, goaded him into writing his "manifesto".

and endeavour are, to paraphrase McLoughlin and Webster, (1970:369), "complex dynamically interelated sets of elements . . . exhibit[ing] certain qualities of . . . organisation . . . . Understanding . . . [this] . . . illuminate[s] . . . [both] intrinsic order and . . . sources of disorder . . . and suggest[s] appropriate . . . controls".

The essence of McLoughlin's systemic approach to planning is described by Robinson thus: "(i)t has two distinguishing characteristics: (a) it focuses on the formulation of alternative . . . sequences . . . through which the system might pass . . . ; and (b) it uses new mathematical techniques, particularly computerized models, to aid in formulating the alternatives", (Robinson, ibid.,96). Robinson continues enthusiastically:

> In addition to their use for explanation and prediction purposes, the new mathematical techniques together with the computer are also being experimented with actually to 'design' the alternative plan themselves . . . . [T]he plan-designer first selects an objective to be maximized or minimized---for example, to minimize the amount of substandard housing . . . , or to maximize employment opportunities . . . . He then formulates a number of conditions which must be met by the plan, such as budgetary restraints, land use restrictions, density limitations . . . [etc.]. The computer can then find feasible solutions if they exist and can improve upon . . . [them] until the 'best' pattern or 'least cost' has been achieved. (Robinson, ibid.,99).

The enthusiasm was not shared by all, however. Only a year after the publication of Robinson's anthology, the Journal of the American Institute of Planners, which had materially helped to promote the approach, published a lengthy article entitled, "Requiem for Large Scale Models", (Lee, 1973:163-178). Based on Lee's assessment, the epitaph for the models might have read: "Data-hungry, yet results overgeneralized; extremely expensive, yet prone to mechanical failure and error; highly complex and comprehensive, yet insensitive to social and political pluralism".

In retrospect, one can see that Lee's article was not so much a requiem for large-scale models, as it was for the initial enthusiasm, which saw the approach as a mystique---a panacea for a turbulent age. As Lee later admitted, his article was "a partisan evaluation, not an impartial survey", (Lee, 1974:56), and as some observers have noted, "While . . . some planners recoiled from those [large-scale] models, others reacted with a redirection of effort", (King, Grava and Seader, 1974). The Logical Functionalist lives on.

The Humanist Strategist

Humanist Strategists focus "on ways to achieve desired changes in organizational structure and behavior. Rooted in psychology and the sociology of organizations . . . [they] elaborate a framework of analysis and action that would lead both to a closer fit between the structure of organizations and their environment and to working relations within organizations that maximize human potentialities and satisfactions", (Friedmann and Hudson, ibid.,3), (emphasis in the original). As such, Humanist Strategists are agents of organizational development. This, according to a leading spokesperson, is a "complex educational strategy intended to change beliefs, attitudes, values, and structure of organizations so that they can better adapt to new technologies, markets and challenges, and the dizzying rate of change itself", (Bennis, 1969:2). "The emphasis on planned organizational change implies a central preoccupation with innovation, the role of 'change agents', and the web of interpersonal relationships of which organizations are constructed. In contrast with the rationalist tradition of decision theory and policy science, organization development is experimental in its methods . . . . [T]heory is more the result of experiential learning than logical deduction", (Friedmann and Hudson, ibid.).

Clearly, there are parallels here, between Humanist-Strategists and the Anarchist Planners who introduced the Matrix of Planners; each view themselves as catalysts--"dealers in the human and psychological dimensions", (ibid.,10), relying more on intuition and feeling than thinking, (in the Jungian sense of those terms). Consequently, Logical Functionalist thinkers like Jantsch, (1971), find them incomprehensible.

The principles of organizational development are derived from the work of some of the Philosophical Synthesizers of the "New Humanism" school, previously mentioned. Friedmann and Hudson summarize:

1. Organizations are 'sociotechnical systems' in which both social organization and technical instrumentation may be viewed as complex variables in the transformation of material and informational inputs into desired outputs (Emery and Trist, 1971).

2. Organizations are composed of communication networks among individuals who themselves have basic human needs for regard, power, and opportunities for self-actualization. The achievement of interpersonal competence is therefore essential to the successful functioning of organizations (Argyris, 1963:1965).

3. Organizational change is best regarded as a complex learning process looking to changed states of awareness and behavior on [the] part of constituent members of organizations (Likert, 1967).

4. Critical to induced organizational change are face-to-face relations between expert and client in which 'the change agent uses his own person and the relationships that he jointly builds, adapts, and terminates with the client system . . . as major tools in liberating, informing, and empowering the client to deal more aptly with itself (or himself) and its (or his) worlds' (Bennis et al., 1969:371; see also Jones, 1969; Schein, 1969).

5. Healthy organizational structures (and corresponding processes) represent an efficient adaptation to their environments. Significant aspects of such environments include the distribution of power, organizational stability, rate of environmental change, degree of openness in the

system, scale and complexity, technical capacity available, and the degree of consensus about organizational ends (Lawrence and Lorsch, 1967).

6. Bureaucratic models of organization are only one form of successful organization. The contemporary environments of most organizations require adaptive structures that are significantly different and may be characterized by a high degree of internal differentiation, overlapping responsibilities, appropriate mechanisms of integration, temporary boundary arrangements, a predominance of high-capacity horizontal channels of communication, and innovation-seeking leadership roles (Bennis, 1966; Lawrence and Lorsch, 1967; Bennis and Slater, 1968).
(ibid.), (emphasis added).

The Humanist Strategist is, then, a "New Humanist" type of planner whose aim is to help construct a "Liberty Machine", Stafford Beer's term for "a dynamic viable system that has liberty as its output", (Beer, 1974:35). The Liberty Machine is calculated to correct the four major policy mistakes which large organizations, whether governmental, industrial or labour-related, are prone to make. Firstly, ineffective organizational adaptation to change, such that typically new departments are set up to handle "excess variety" spawned by change, leaving older departments virtually unaltered and unresponsive, (ibid.). Secondly, models developed by the organizations treat relevant components, (in the case of government, such elements as population, labour force, industries, schools, welfare recipients, etc.), as low-variety, stable entities, whereas in actuality, they are dynamic systems, continually interacting, with each other, and with other components of the society. Thirdly, given the limits of the human brain to absorb variety, even these low-variety models must be further aggregated to be reacted to by the decision-maker. The mistake here is that this step is usually considered to be the responsibility of the economist or the administrator. But says Beer, "to decide which aggregations are the ones to use

is a problem in cybernetics, not economics---and still less in administration", (Beer, ibid.,39). The fourth and, to Beer, the most dangerous mistake is due to inadequate methods of data collection analysis and display. Because of these inadequacies decision-makers are forced to react to situations based on outdated data, that represents conditions already drastically changed. In short:

> We have fast communications . . . but they are not mobilized. We have computers . . . but they are busily taking over the old system---and are actually taking longer to do the job . . . . We are using our powerful tools to automate and to elaborate the limited processes that we managed to achieve with the unaided brain and the quill pen---processes which our new tools were invented precisely to transcend.
> (ibid.,40).

Beer proves himself not only of the New Humanist school, but also a genuine anarchist, (albeit of the cybernetic variety), when, assuming an industrial work situation, he discusses who should be making the decisions:

> Our rather technocratic culture immediately answers: a team of engineers, or accountants or operational research men. Well I don't believe it. That just is not necessary; and besides no one will be interested in the model they create. The people who know what the flows are <u>really</u> like are the people who work in the middle of them: the work-people themselves. And if their interest can be captured in putting together the total model of how the firm really works, we shall have genuine worker participation to replace a lot of talk about worker participation.
> (Beer, ibid.,41).

Thus, having commented on all but one category of "who plans", we have returned almost to the point of departure. The only difference between the Anarchitectes' and Beer's point of view is that the former have arrived there through unsystematic romantic-perceptive feeling, while Beer replaces this with cybernetic rational-romantic feeling.

In their review of the literature, Friedmann and Hudson remark on the

extraordinary difficulty of translating the findings, drawn from experience of organization development with the single organization, to the societal scale, (ibid., 10,11). Could it be they were unaware of the four-year study and application of the operational research approach to public planning in Coventry, England, made by Friend and Jessop, (1969) ?

Friend and Jessop's definition of operational research is:

> The attack of modern science on problems of decision-making arising in the management of organizations . . . . In effect it sets out to provide a more explicit 'technology of choice', to amplify the capacity of people in organizations to make purposive selections between alternative courses of action. (Friend and Jessop, 1969:xx)

Witnessing a review of Coventry's development plan, and the consideration of radical changes in such fields as education, transport, and capital budgetting, not only through attending official meetings, but also informal discussions within departmental offices, and even private debates at meetings of the political parties involved, these Humanist Strategists were able to gradually develop an understanding of local government problems in Coventry, (ibid.,xxi).

In the meantime, specialist members of the team, with disciplines as varied as statistics and social anthropology, brought their expertise to bear. Sharing a holistic, synthetic, systems approach which assured a learning process which blended the distinctive influences of operational research and social science, the team gradually developed conceptual models of the nature of the planning process and how basic relationships of its components might respond to different forms of change. Through these models, the team developed a relevant "technology of strategic choice", and appropriate organizational forms

to match, (ibid.).[44]

If Friedmann and Hudson were to bring their review of the literature up-to-date, not only would they have to include Friend and Jessop's work, but, in the guise of "strategic planning", they would find that operations research has by this time being considered by the North American planner, (albeit, a streamlined version), cautiously promoted by the Deputy Director of the American Planning Association, Frank S. So, (1984).

So compares strategic planning with the traditional approach still favoured by the Logical Functionalists, i.e., "setting goals, developing and analyzing alternatives, adopting plans, implementing plans, and establishing some sort of feedback or monitoring system", (ibid.,17). In contrast, the strategic planner, whether working for business or government, will begin by examining existing conditions, ("How are we doing?"); make an "environmental scan" of exogenous factors; and critically examine each element of the corporation (or city).

The above steps, representing the "Situation Analysis", or "Situation Audit", involve the "WOTS"---the weaknesses, opportunities, threats, and strengths of the situation. On the basis of this audit, a few decisive "Mission Statements", are made, describing strategic objectives and sub-objectives that

---

[44] It should be noted, with Friedmann and Hudson, (ibid.,3), that the divisions between planner types are by no means hard and fast. As an instance, Harry Lash, who was mentioned as a "Local Planner" type, might conceivably be considered a "Humanist Strategist", since he is an alumnus of the Tavistock Institute of Human Relations, (where Neil Jessop is Director of Operational Research and John Friend, a Senior Research Fellow), and his approach to planning clearly reflects this association. At the same time, Friend and Jessop, because of the pioneering nature of their work in Coventry, might legitimately be considered Observers, as well as Humanist Strategists.

deal with the WOTS in an action-oriented manner. The process ends with the implementation of these objectives, and a feedback system monitoring effectiveness, (ibid.).

So gives various reasons for the planners' growing interest in strategic planning, for instance, as it is couched in a language understood by the business community, it is one method of getting local businessmen involved in civic affairs. Another is that it appears, on the surface at least, to have advantages over the traditional approach:

> Strategic planning seems to be something that can be done a lot faster. Strategic planners ... tend to exploit existing data and past studies. The process also relies heavily on the knowledge of participants, knowledge that is often widely known and widely shared; there is no need to study the obvious. (So, 1984:18).

In common with other operations researchers, Strategists also exploit group dynamics techniques to arrive at consensus. "Thus the government strategic planner may have to shift his role slightly from being a proposer of policies and plans (which he then tries to sell) to being a facilitator of a strategic planning process", (ibid.,20).

This calls for decisiveness on the part of planners---a willingness to trust their intuitions. As Jung has pointed out, "(m)any business tycoons, entrepreneurs, speculators, stockbrokers politicians, etc.," are of the "Extraverted Intuitive Type", (Jung, 1976:369). "Business planners started out trying to get business leaders, who often relied on intuitive solutions, to act on more (sic) rational[45] grounds. Recent experience indicates that intuition is

---

[45] In the conventional sense of the word. Here, we postulate that intuition forms an integral part of many reasoned decisions, (see Appendix B).

extremely important. Public planners, too, need to get away from the fear of acting intuitively", (So, ibid.,20).

Will the approach work in public planning, or is it just another fad? So asks this question, and his positive response is cautious; nevertheless, it is salutary that the American Planning Association "has used the concepts of business strategic planning to prepare its own situation analysis and adopt the organization's first three-to-five year strategic plan", (ibid.,19).

The Transdisciplinary Educator

The last category within the quadrant of the Synthesizer, (and the last of the Matrix of Planners as a whole), is occupied by the Transdisciplinary Educator. The Educator "leads out"[46] the next generation of planners---from ignorance to knowledge, from unstructured enthusiasm to disciplined action. But (to stress our present thesis), planning can no longer be taught as if there is only one kind of planner, rather than sixteen. Nor can it be taught as if it is one of its component specialisms "writ large". Without a hint of deprecation, all planner types and all specialisms within the spectrum of the Matrix of Planners need to be seen in context, i.e. as parts of a larger whole.

Over the last thirty years, fashions in pedagogical emphasis in planning education have changed, from physical, through economic, to systems and social planning; from set curricula, to free choice, and latterly, to choice with an urban studies core, (Mann, 1970; Perloff and Klett, 1974). Lawrence Mann, prominent

---

[46] I am indebted to Thompson, (1971:86), for his reminder that the Latin root of "educator", "ex ducere", means "to lead out".

among those who have looked to the future of planning education, has recognized the "new planning" school of advocates of participatory democracy and the opposing schools that see planning as a systems science, (Mann, ibid.). Jakobson adds to these, the "two dominant dimensions of the 'old planning': the liberal reformer in search of social justice, and the Utopian designers who firmly believe in the superiority of their ideal community", (Jakobson,1970:269). He also recognizes the budding bureaucrats, concerned with "administrative efficiency", and "the few who approach planning from the philosophical perspective", (ibid.). Jakobson lines up these six directions, (see Chart 5), to show the contrasts between each of these; in terms of professional attitude, planning goal, planning method, validating measure and implementation method, (ibid.,270).

Though quite different in approach and format,[47] Jakobson's analysis reflects the general theme of this thesis: that there is a whole range of planners, each in conflict with some, while being in concord with others, (see Diag. 16). Moreover, the breadth of his understanding, (and the fact that he teaches), makes him a prime candidate for the title of "Transdisciplinary Educator".

Jacobson is not the only educator in the planning field to recognize trans-disciplinarity as an underlying factor in the improvement of our understanding of

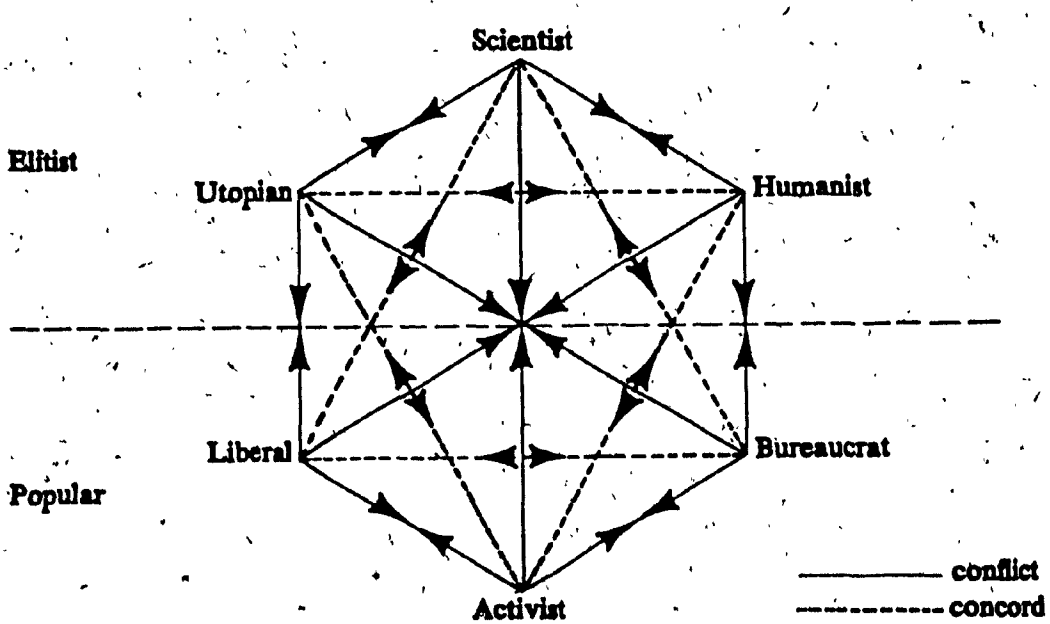
---

[47] Jakobson recognizes only six of the sixteen planner types which form the Matrix of Planners typology, postulated here. No doubt his insights are based on a combination of empirical observation and intuition, and his analysis does not touch on the philosophical and psychological bases for a temperamental predisposition which leads one to take a particular stance or another. It is interesting to note, however, that notwithstanding the differences of approach and format, his conclusions and those of this author are not dissimilar.

CHART 5: Contrasting Approaches to Planning
(after Jakobson, 1970:270)

Central Ideological Concern	*Professional Attitude*	*Goal of Planning*	*Method of Planning*	*Validating Measure*	*Method of Implementation*
Utopian Conceptualization (Utopian)	dogmatic missionary	ideal society	deterministic design	uniqueness of idea	convincing proselytizing
Quantitative Determinism (Scientist)	scientific absolutist	predictable society	technological forecasting	measurable facts	scientific professionalism
Ethical Norms (Humanist)	humanist philosophical	better society	intellectual conjecture	logic of purpose	educational dialogue
Administrative Efficiency (Bureaucrat)	cautious traditional	orderly society	adaptive integration	conformity to norms	policy initiation
Participatory Democracy (Activist)	classic liberal	new society	interpretative advocacy	urgency of cause	political activism
Institutional Democracy (Liberal)	democratic reformist	just society	deliberative rationalization	majority vote	democratic process

DIAGRAM 16: Conflict and Concord Among Planners
(after Jakobson, 1970:271)



planning. In a critical examination of current "theories of planning"[48], Richard Bolan seems to possess the broad synthetic approach we associate with this kind of educator. He sees as "fundamental issues . . . how . . . [planners] see reality, how they think, and how they act", (Bolan,1974:14). In this regard, he notes four social perspectives on planning theory:

> (1) a substantive level of human interaction with other humans and with the physical and natural environment; (2) a cultural level where ideas emerge from social relations and are internalized into norms and values; (3) an institutional level where the interaction of the substantive and cultural levels is codified and behavior becomes routine, organized, stable, and controlled . . . ; and (4) a psychological level where the social relations arising from the interaction of the other three levels are internalized within the consciousness of the individuals . . . . These four levels are seen as acting with each other in complex patterns of multi-causality.
> (Bolan, 1974:18), (emphasis added).

Although Bolan recognizes, as well he might, these four aspects as "levels", to be integrated, displayed appropriately, one can see how they might be interpreted from our vantage point, as characteristics of the four basic types of planner of the "Matrix of Planners", (see Diagram 17). Further, following Thompson, (1971:79 et seq.), Bolan's taxonomy can also be applied to the level of the quadrant.

Bolan shares the point of view expressed here that "planning is . . . a thinking process", (ibid.,15), and (agreeing with Marx and others), that "human thought is derived from human activity and from the social relations intrinsic to that activity . . . [t]hus, planning is seen as a social process", (ibid.). Using these two postulates as his axes, he combines insights from a wide range of sources to outline "mapping categories for [the] planning theory terrain", (ibid.,17).

---

[48] Following Faludi, (1973:4), i.e. how planning is conducted.

Diagram 17: Bolan's Taxonomy of Social Relations viewed as characteristics of the four major types of planner

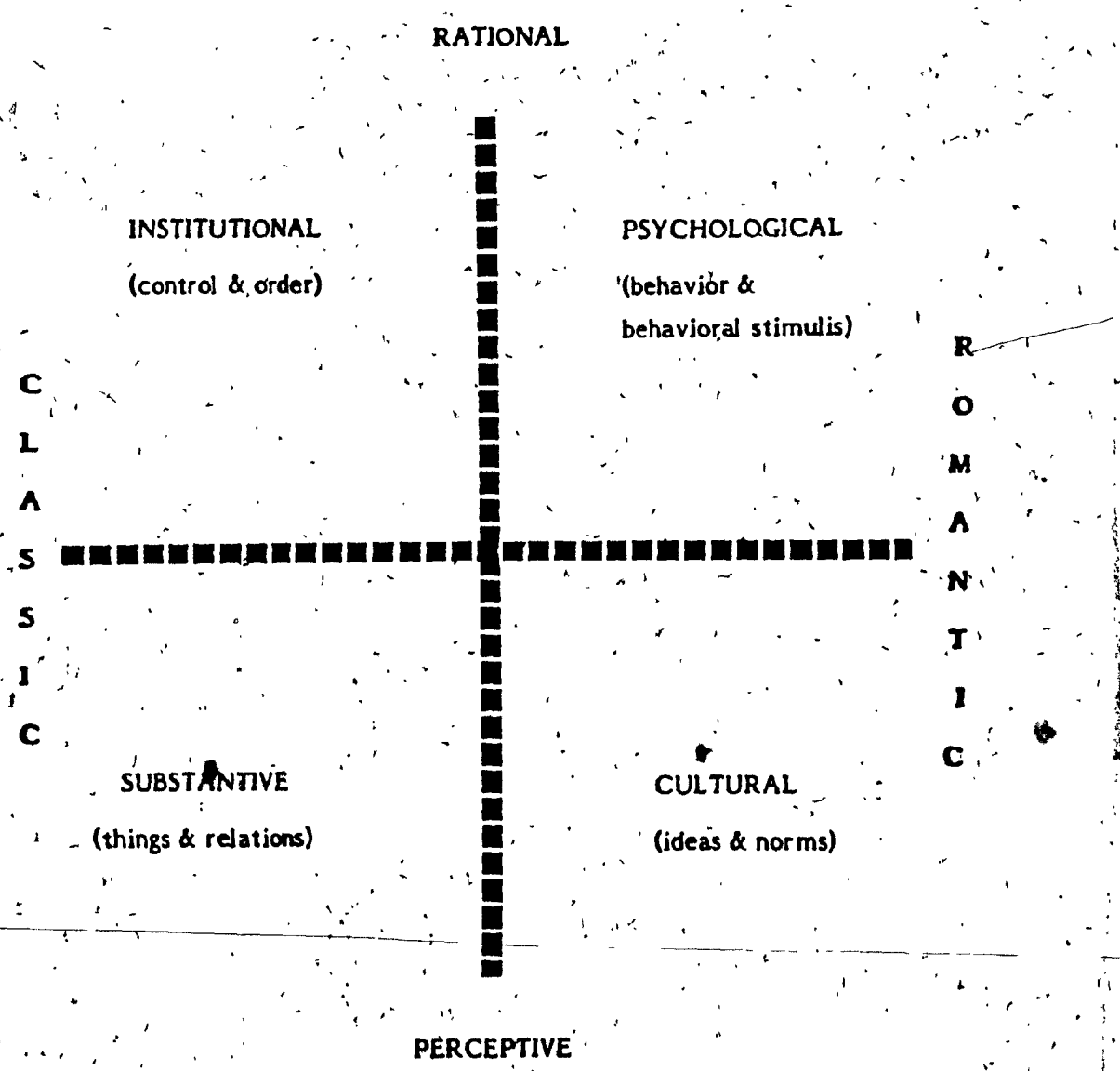


Chart 6 summarizes his exposition of the characteristics of his "social perspectives", (ibid.,18,19). Since Bolan's aim is to describe the "planning theory terrain", rather than "planners", as such, his assessment can hardly be expected to match in every way the categorical system developed here; nevertheless, there is an encouraging degree of similarity, which might be explored in another context, though it is beyond our scope here.

As a final example of the Transdisciplinary Educator, we could do no better than to put forward the name of a planner and educator whom S.B. Zisman was to characterize as "one of the most profound, penetrating, creative minds in planning of our time". An accolade made in the preface of The Modern Metropolis, Zisman was referring to the writer of the essays that make up that anthology Hans Blumenfeld, (1967).

As an illustration of the breadth of his transdisciplinarity it suffices to study the headings underwhich the volume's editor, Paul Spreiregen, has classified Blumenfeld's essays. Under the first heading, "The Modern Metropolis: Its Origins, Growth, and Form", are five essays concerning the history of planning; next come four essays on "Metropolitan and Regional Planning". These are followed by six essays for each of the following subjects: "Transportation", "Residential Areas", "Urban Design", and the "Methodology of Planning". Add to this, personal experience of, and an abiding interest in, planning in Germany and Russia, as well as the United States and Canada; and an open and active proponent of peace initiatives.[49] Granted, Blumenfeld falls a

---

[49] In 1982, on the occasion of his ninetieth birthday, Hans Blumenfeld initiated "The Franz Blumenfeld Peace Foundation", in memory of his brother who died on the Somme in 1914, and in support of deeply felt personal beliefs.

Chart 6 : Categories for Mapping the Planning Theory Terrain
Source: (Boland, 1974:17)

Social Perspective / Time Cognitive Perspective	Substantive framework of things and relations	Cultural framework of ideas and norms	Institutional framework of control and order	Psychological framework of behaviour & behaviour stimuli
Ways of understanding the past and present	Basic physical and social sciences Architecture Engineering Economics Demography Geography Sociology	History Ethics Jurisprudence Theology Culture Fashion	Political Theory Administrative theory Institutional structure Judicial precedent Administrative rules and regulations	Personality devlt. Conditioning Transactional analysis Small group & Political behaviour Environmental psychology
Ways of Imagining the future	Straight-line extrapolation Increment-marginal analysis Predictive modeling Systems Theory Game theory Decision theory	Utopian constructs Master planning Futuristics	Organizational development Allocative planning Innovative planning Scientific management Temporary society	Behaviour modification Market research Political voting research Behavioural technology
Ways of achieving the future	Persuasion by force of reason and rationality	Ideological indoctrination Ideological revolution	Coercion Regulation and rule-making Power elite, institutional change, and conflict strategies	Communication & diffusion strategies Education and learning strategies Participation and exchange strategies

little short of a complete modern-day Renaissance Man, (for instance, this writer has never detected an interest in "theory of planning" in his work); nonetheless, the scope of his transdisciplinarity is second to none.

9. CONCLUSION: CONFLICT, CONCORD AND PLANNING EDUCATION

9. CONCLUSION : CONFLICT, CONCORD AND PLANNING EDUCATION

Although Jakobson makes the point about conflict and concord between planner types in diagramatic form, (see Diagram 16), he does not pursue the matter beyond this graphic statement. It will be taken up here, since within this context it is an important feature and moreover seems, from our vantage point, to be the crux of the planning, and therefore, planning education problem.

Both Thompson (1971) and Simmie (1974) put forward the view that conflict is endemic to modern institutions, postulating a realization of institutional and social values through a contentious dialectic between rival sub-groups. There is however, an inherent doubt that in regard to planners, the necessary debate between the different types of planner will take place. Unlike the tribal hunting team mentioned by Thompson, there is often a lack of recognition of the oneness of the profession. Thus each faction tends to disengage itself from the total Matrix of Planners, recognizing only those in their particular quadrant or even sub-quadrant of planners as if it alone represented the total profession.

The incipient danger in these centrifugal forces is that each quadrant develops a negative stance to the others that short-circuits the possibility of the planning profession performing its societal function in the most productive manner. Beyond ignoring each other, each has its typical negative reaction. Reformer planners can become iconoclasts, seeking the undermining of the established system as an end in itself. Alternatively, they may become totally

discouraged and disengaged; and, mirroring the "Theatre of the Absurd", can drift into inaction, "waiting for planning" that like Godot, never comes.

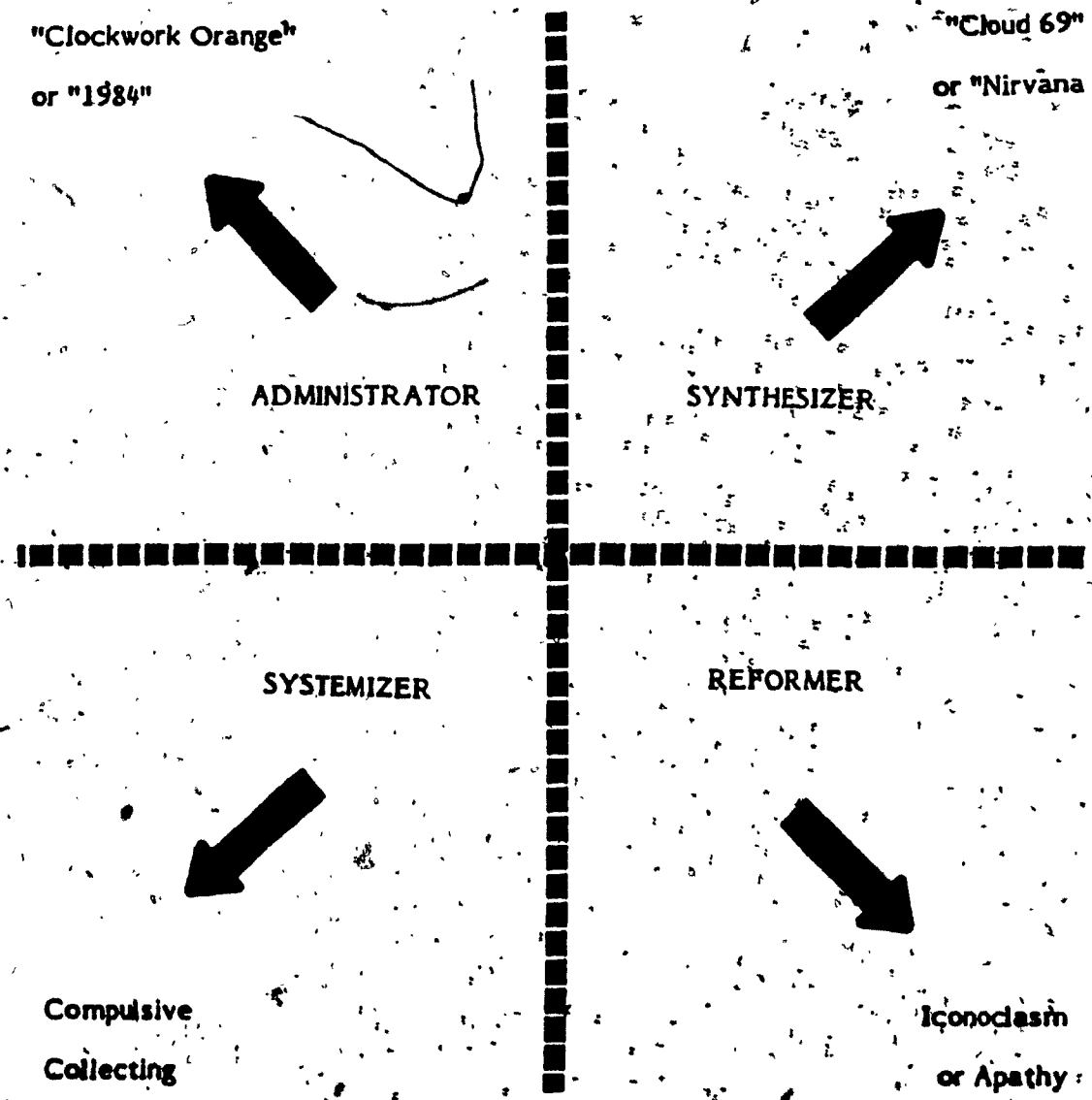
Systemizers can become pack-rats or magpies. Afraid to act "until all the data is in", eventually, they may forget information is collected for a purpose, and begin to amass and categorize it for its own sake. Administrators, over-indulging the need for order and routine, may, on the advice of behavioral scientists, move toward creating the one-dimensional world of The Clockwork Orange" or of 1984. In turn, Synthesizers may narcissistically fall in love with their systems and like the Systemizers, forget they have a function in society beyond perfecting them. As each quadrant of planners grows away from the others, (see Diag. 18), the sophomoric world-view of "good guys" and "bad guys" becomes a self-fulfilling prophecy, accentuating the atomization process.

The only way these tendencies can be kept under control is through continuous exposure to the other modes and styles of professional thought. And the place to learn this habit is in the university. Educators fail in their duty to students if they do not show them that their enemy "completes . . . [them] more profoundly than . . . [their] groupies", (Thompson, 1973:86). It is therefore essential that the university, while encouraging the development of students' interests and natural talents, "lead them out" of the dangers of narrowing their appreciation of who is planning to only those who share their point of view and temperamental bias.

Students must learn in time to cherish their enemies for "what most regard as a Christian platitude is, in reality, a rather sophisticated attempt to reverse the tragedy of conflict", (ibid:). Student reformers, systemizers, administrators and synthesizers must learn their identity within the Matrix of

Diagram 18: Centrifugal Forces within the Matrix of Planners

Each quadrant is prone to a different set of negative impulses which may manifest themselves in a number of destructive forms.



Planners by continual intercourse with those, not only within, but outside their type and sphere of particular interest. Although debate may have its merits, in developing concord rather than conflict, "disputation", a mediaeval form of verbal encounter which historically, the debate replaced, would seem to be far more productive. Debate is a "zero-sum" game which begins on a point of disagreement. The aim is to sustain one's point of view, despite reasonable arguments for changing it; not to seek knowledge and understanding but to defeat "the opposition" in verbal combat, using the sophistry of verbal fireworks as the weapon. Under such circumstances, it is virtually impossible to learn from those with different views, except vestigially, and then only in retrospect. The mediaeval disputation, on the other hand, stifles prejudice and encourages the maximum cooperation between opposing groups, points of view or ideologies, by starting from a point of agreement. The ensuing dialogue seeks, by proposition, amendment, and counter-proposition, to find how far this commonality can be sustained. As with the debate, participants may not change their points of view significantly, but unlike it, they come away with a growing respect and understanding of their opponent's views and methods.

The majority of students may, on leaving the university, still be incapable of working outside their respective speciality. However, this kind of exposure will encourage those who are temperamentally able to work in the modes of more than one quadrant[1]. Few today are able to be so flexible. There must be a

---

[1] Planning, being akin to problem-solving, research in that field may indicate a much higher proportion of planners capable of cross-quadrant thinking than might otherwise be expected. McKenney and Keen, (see Ewing,1977), found that one in four of their subjects were capable of using modes other than the

dramatic increase in their number if planning is to become equal to its task of preparing society for "a future that is different"[2].

---

one they preferred when a particular problem merited it. This finding is to some extent confirmed by research undertaken by this author. In a sample of 395, more or less equally divided between male and female, 27.4 percent of respondents to the Jungian Type Test, (Wheelwright, et al., 1964), (23.4% males, 31.7 females), are either bi-functional, (i.e. have equal access to two mental functions), or multi-functional, (i.e. might call on any of the four functions equally to resolve problems), (see Appendix E). Only a small, statistically irrelevant number of the respondents were planners, thus it cannot be said with certainty that planners match the average in this regard, but this might well be the case.

2 In addressing a plenary session at the 1967 Annual Conference of the Town Planning Institute of Canada, Manfred Max-Neef drew attention to this phrase as being the only thing that one can say with certainty about the future, (see Max-Neef, 1967:1).

10. RECAPITULATION: WHY A TYPOLOGY FOR LATE TWENTIETH CENTURY PLANNERS ?

10. RECAPITULATION: WHY A TYPOLOGY FOR LATE TWENTIETH CENTURY PLANNERS ?

Who plans ? Accepting planning in its broadest sense of being the link between knowledge and action, everyone plans---but much less frequently, and in a less orderly fashion than we would like to believe. We, as individuals in a free society, are brought up to think we plan our own lives, but how true is this ? How often is it not the case that we muddle through, or simply drift, until influenced by others; or if we do plan, how often are these plans thwarted by others. Who are these "others"; the "big" planners who so often shape and give direction to our lives ? In our culture, the biggest are big business and big government. These are the forces that plan the society in which we live and more narrowly plan as individuals. Integral to these forces is a disparate group of professionals who devote themselves full time in some way linking knowledge and action. It is these planning specialists that are our particular interest, for they too plan less than they believe, and this is cause for concern.

The Importance of the Study

Incipient in many countries during the latter years of the nineteenth century, modern professional planning came into being around the time of the First World War, but it is only since World War II that it has become generally accepted as the prime means of dealing with an uncertain future. Now ubiquitously promoted and practised, its very success is the source of misgivings. At the point when planning is accepted almost as the panacea of the age,

planners are experiencing an identity crisis. The question of who plans is therefore pertinent to the times.

Chesterton was right. Nothing fails like success. Progress within the field has added to its complexity. Planning, until our era the prerogative of high priest or potentate, is now "for people". The old-style master-builder has become specialized. Specialization has in turn led to factionalism, each sub-group seeing itself as the only authentic planner. Others, if recognized at all, are thought to occupy a subordinate position, or may even be seen as subversive. With each faction believing and proclaiming its pre-Copernican centrality, the result is the reverse of a coherent and comprehensive link between knowledge and action.

Such circumstances can well mean the beginning of the end. If each planning coterie persists in its self-centredness, the public will lose confidence. It may thus be a prelude to planning being rejected as society's means of coping with the future. But paradoxically, the opposite may be the case; current chaotic conditions may be a sign that we are at the end of the beginning. In other words, it may herald, not disintegration, but a new integration at a higher, more complex level. What appears as chaos may well be instead, a new order waiting to be discovered; the first signs of a structure of planning specialities that can lead to comprehension, cooperation, coordination and interpenetration, thus a structure more appropriate to the tasks of the late twentieth century than are the individualistic specialisms we have inherited.

Research Aim and Method

This present study was proposed in the belief that such a structure will not emerge from the chaos of present practice without some effort to define it

objectively. In searching for this definition, it seems of more than academic interest that the typology be as all-inclusive as possible. Diversity of opinion and functional approach within the field of planning is nothing but healthy if each faction can see itself as belonging to a whole which is greater than the sum of its parts. Without this sense of the whole, each faction will continue in the mistaken belief of its exclusiveness, to the detriment of the planning process and of the society it serves. Thus a suitably broad format was called for to embrace all planners of all persuasions.

To assure completeness, the development of this format demanded a two-stage analysis. The approach taken here postulates that in our society, planners are so varied a group as to be representative of, if not the entire spectrum of human temperament and intellectual orientation, at least a very broad range of intellectual and psychological type. Assuming this to be so, the construction of a frame of reference representing all shades of modes and styles of mental attitude seemed a prerequisite for the development of a suitably broad typology of planners. To construct a convincing "Matrix of Planners", one must begin by developing a "Matrix of Mind".

This latter was approached initially by examining two quite different observations of human interactions: Hoffer's classic study of mass movement as the vehicle for social change, and Thompson's analysis of the social dynamics of a primitive hunting party, and their relationships to cultural history. Correlations between these two have then been sought by reference to the differing functions of the hemispheres of the brain, and lastly, to two Jungian concepts: that of the Hero Archetypes, and of Psychological Types. (This latter was modified to account for this writer's contention that Jung's conception of

"feeling" as a rational process and "intuition" as irrational perception should be reversed).

The "Matrix of Planners" that emerged from this research, juxtaposed modes of thought (rational/perceptive) with styles of thinking (classic/romantic), yielding four basic planning types: the Reformer, the Systemizer, the Administrator, and the Synthesizer. The clue to the development of greater sophistication and utility is in recognizing that each quadrant of the matrix, represented by the four basic planning types, can be treated as a microcosm of the whole, thus there are sixteen types of planner, (see Appendix D).

We may conclude that each type of planner performs a useful service to society, and contributes a richness to the profession. In isolation from other planning types, with intercourse only with planners of like mind, the law of incest is manifest. Weaknesses become exaggerated, sometimes overwhelming the strengths. The reverse is surely as true: when heterodox dialogue is established among planning types, weaknesses become weaker, and strengths stronger.

Lest this sound like we are propounding here the biblical panacea of the lion lying with the lamb, one must hasten to add that difficulties are inherent and remain, but, (to use another biblical analogy), to know the name of the angel with whom you are wrestling, gives power and substance to the confrontation.

I give to Harry Lash the last word: "[E]ffective planning of human settlements in western democratic society . . . depend more on human relations in the process of arriving at decisions than . . . on the planners' science and art of making plans", (Lash, 1977:12). He goes on to speak of planners, politicians, and the public, but what he has to say is equally relevant to the intra-

professional dialogue; thus, to paraphrase:

> The successful process needs planners . . . who know how to get behind the facelessness of . . . (other planners) and find the human beings who are there. Usually you will find friends and not the potential adversaries you expected . . . . The key to the success of the planning process . . . is a high and constant degree of interaction.
> (ibid.).

It is to be hoped that this work will be seen as providing a practical format to begin that sixteen-way dialogue.

REFERENCES

REFERENCES

Abrams, Charles, (1971), The Language of Cities: A Glossary of Terms, New York, Viking.

Aitken, Henry D., (1956), The Age of Ideology: The 19th Century Philosophers, New York, Mentor.

Alexander, Christopher, (1965), "The City is not a Tree", in Architectural Forum, 122, (May), pp. 58-61.

_____, Murray Silverstein, Shlomo Angel, Sara Ishikawa, Denny Adams, (1975), The Oregon Experiment, New York, Oxford University Press.

_____, (1977), A Pattern Language: Towns, Buildings, Construction, New York, Oxford University Press.

Alexander, Tom, (1977), "The Deceptive Allure of National Planning", in Fortune, XCV:3, (Mar.), pp. 148-157.

APA News, (1982), "Two Planners on the Hill: Kaptur Comes to Congress", Chicago, American Planning Association, 17:12, (Dec.), p. 1.

Arango, Jorge, (1970), The Urbanization of the Earth, Boston, Beacon Press.

Arendt, Hannah, (1978), The Life of the Mind: Vol. 1, Thinking, New York, Harcourt Brace Jovanovich.

Argyris, Chris, (1965), Organization and Innovation, Homewood, Ill., Irwin-Dorsey.

Armstrong, Alan, (1974), "Canada", in Arnold Whittick, (ed.), Encyclopedia of Urban Planning, New York, McGraw-Hill, pp. 1089-1130.

ASPO, (1975), "Private Planning for the Public Interest", Chicago, American Society of Planning Officials, Planning Advisory Service Bulletin, (Oct.).

Ayer, A.J., (1982), Philosophy in the Twentieth Century, New York, Random House.

Bacon, Edmund N., (1960), "A Case Study in Urban Design", in Journal of the American Institute of Planners, 27:3, (Aug.), pp. 224-235.

_____, (1967), Design of Cities, New York, Viking.

Barnett, Jonathon, and Nory Miller, (1983), "Edmund Bacon: A Retrospective", in Planning, Chicago, American Planning Association, 49:11, (Dec.), pp. 4-11.

Baxter, David, (1975), "Speculation in Land", in R. Charles Bryfogle, and Ralph R. Kreuger, (eds.), Urban Problems---Revised, Toronto, Holt, Rinehart and Winston of Canada, pp. 322-327.

Beer, Stafford, (1959), Cybernetics and Management, London, English University Press.

_____, (1974), Designing Freedom, (Massey Lectures, 13th Series), Toronto, CBC.

Bell, Anne Olivier (ed.), (1982), The Diary of Virginia Wolf: Vol. IV: 1931-1935, London, Hogarth.

Bell, Gwen, Edwina Randall, and Judith E.R. Roeder, (1973), Human Environments and Human Behavior, Stroudsburg, Penn., Dowden, Hutchinson & Ross, Community Development Series, Richard P. Dober (ed.).

Bennis, Warren G., K.D. Benne, and R. Chin, (eds.), (1969), The Planning of Change: Readings in the Applied Behavioral Science, New York, Holt, Rinehart and Winston, (2nd. edit.).

_____, and P.E. Slater, (1968), The Temporary Society, New York, Harper and Row.

_____, (1969), Organization Development: Its Nature, Origins and Prospects, Reading Mass., Addison-Wesley.

Bentley, John E., (1960), Philosophy: an Outline History, Paterson, N.J., Littlefield, Adams (rev. edit.).

Berlin, Isiah, (1956), The Age of Enlightenment: The 18th Century Philosophers, New York, Mentor.

Berry, Brian J.L., (1964), "Cities as Systems within Systems of Cities", Papers and Proceedings of the Regional Science Association, 10.

Beveridge, W. B., (1950), The Art of Scientific Investigation, New York, Vintage.

Birch, Eugenie Ladner, (1983), "Radburn and the American Planning Movement: The Persistence of an Idea", in Donald A. Kreuckeberg, (ed.), Introduction to Planning History in the United States, New Brunswick, N.J., The Center for Urban Policy Research, Rutgers University.

Blackburn, Thomas R., (1972), "Sensuous-Intellectual Complementarity in Science", in, Robert E. Ornstein, (ed.), The Nature of Human Consciousness: A Book of Readings, New York, Viking Press, pp. 27-40.

Blake, Peter, (1960), Le Corbusier: Architecture and Form, Harmondsworth, Middlesex, Pelican.

Blumenfeld, Hans, (1967), The Modern Metropolis: Its Origins, Growth, Characteristics and Planning, Paul D. Spreiregen, (ed.), Cambridge, Mass., M.I.T. Press.

Bolan, Richard S., (1974), "Mapping the Planning Theory Terrain", in Godschalk, (ed.), Planning in America: Learning from Turbulence, Washington, D.C., American Institute of Planners, pp. 13-34.

Boulding, Kenneth, (1970), "Evolution and Taxes . . .", in Transactions: Social Science & Modern Society, 7:6, (Apr.), originally published in The Brandywine Anthology, Michigan Business Review, 1958.

Brown, Denise Scott, (1969), "On Pop Art, Permissiveness and Planning", in Journal of the American Institute of Planners, 35:3, (May), pp. 184,186.

Bryant, R.W.G., (1972), Land: Private Property, Public Control, Montreal, Harvest House.

Buber, Martin, (1958), I and Thou, (trans. Ronald Gregor Smith), New York, Charles Scribner's Sons, (2nd edit.)

_____, (1970), I and Thou, (trans. Walter Kaufmann), New York, Charles Scribner's Sons, (with Prologue and Notes by Walter Kaufmann).

Buonaiuti, Ernesto, (1937), "Ecclesia Spiritualis", in The Shaping of the Idea of Redemption in the East and West, Eranos-Jarhbucher, Vol. V., republished and translated from the German in Joseph Campbell, (ed.), Spirit & Nature, papers from the Eranos Yearbooks, Vol. 1, New York, Pantheon Books, for Bollingen Foundation Inc. (c. 1954), pp. 213-250.

Cadwallader, Eva H., (1980), "A Jungian Analysis of Current Tensions among Philosophers", in Philosophy Today, Vol. 24, pp. 349-359 (Winter).

Capra, Fritjof, (1980), The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism, New York, Fontana Collins (6th edit.).

Carey, George W., (1971), "Review: Explanation in Geography by David Harvey", in Journal of the American Institute of Planners, 37:2, (Mar.), pp. 135-136.

Catanese, Anthony J., (1974), Planners and Local Politics: Impossible Dreams, Sage Library of Social Research, Vol. 7, Beverley Hills, Sage.

Chapin, F. Stuart, jr., (1965), Land Use Planning, (2nd edit.), Urbana, University of Illinois Press,

Chapin, F. Stuart, jr. and Henry C. Hightower, (1965), "Household Activity Patterns and Land Use", in Journal of the American Institute of Planners, 31;3, (Aug.), pp. 222-231.

Chapin, F. Stuart, jr., (1968), "Activity Systems and Urban Structure: A Working Schema", in Journal of the American Institute of Planners, 34:1, (Jan.), pp. 11-18.

_____, (1974), Human Activity Patterns in the City: Things People do in Time and Space, New York, Wiley.

Chase, Stuart, (1956), The Proper Study of Mankind: An Inquiry into the Science of Human Relations, (revised edit.), in consultation with Edmund de S. Brunner, New York, Harper & Row, Perrenial Library.

Childs, Marquis W., and Douglass Cater, (1954), Ethics in a Business Society, New York, Mentor, (The New American Library).

Ciberowski, A., (1975), untitled presentation before le Département d'urbanisme, Université de Montréal, Montréal, Qc., (Oct.).

Clawson, Marion, and Peter Hall, (1973), Planning and Urban Growth: An Anglo-American Comparison, London/Baltimore, Johns Hopkins University Press, for Resources for the Future, Inc., Washington, D.C.

Cloward, Richard A., and Frances Fox Piven, (1975), The Politics of Turmoil: Essays on Poverty, Race and the Urban Crisis, New York, Vintage.

Conant, James Bryant, (1965), Two Modes of Thought: My Encounters with Science and Education, New York, Pocket Books, (Credo Series), first pub., Trident Press (c. 1964).

Conot, Robert, (1984), "Tracking John Friedmann", Planning, American Planning Assoc., 50:2, (Feb.), pp.24-26.

Coser, Lewis A., (1971), Masters of Sociological Thought: Ideas in Historical and Social Context, New York, Harcourt Brace Jovanovich.

Cox, Harvey, (1966), The Secular City: Secularization and Urbanization in Theological Perspective, New York, Macmillan, (rev. ed.), (c. 1965).

Curl, James Stevens, (1974), "Baron Georges-Eugène Haussmann", in Arnold Whittick, (ed.), Encyclopedia of Urban Planning, New York, McGraw-Hill, pp. 492, 493.

Dabrowski, Kazimierz, (1972), Untitled pamphlet, Second International Conference on Positive Disintegration, Loyola College, Montreal, (27-31, Dec.).

Dahl, Robert A., and Charles E. Lindblom, (1953), Politics, Economics and Welfare, New York, Harper and Bros.

Davidoff, Paul, (1965), "Advocacy and Pluralism in Planning", in Journal of the American Institute of Planners, 31:4, (Nov.), pp. 331-337.

_____, and Linda Davidoff, (1974), "Commentary: The Underlying Assumptions of Advocacy Planning: Pluralism and Reform, by Donald F. Maziotti", in Journal of the American Institute of Planners, 40:1, (Jan.), pp. 39, 48.

Deachman, Helen and John Woolfrey, (1982), "Highrises and Super Profits---The Marriage of State and Capital", in Dimitrios Roussopoulos, (ed.), The City and Radical Social Change, Montreal, Black Rose Books, pp. 301-344.

Dean, Andrea O., (1981), "Montreal", in AIA Journal, 70:14, (Dec.), pp. 50-59.

Deikman, Arthur J., (1972), "Bimodal Consciousness", in Robert E. Ornstein, (ed.), The Nature of Human Consciousness: A Book of Readings, New York, Viking Press, pp. 67-86.

Demarest, Michael, (1981), "He Digs Downtown: For Master Planner James Rouse, Urban Life is a Festival", in Time, 118:8, (Aug. 24), pp. 36-43.

Dernoncourt, Jean, (1972), "Les Cahiers d'Anarchitecture" (excerpt) in L'Architecture d'Aujourd'hui, no. 161, (avril-mai), p. XLIII.

Donnison, David, (1973), "Planning and Government", in Peter Cowan, (ed.), The Future of Planning, Centre for Environmental Studies Series, Vol. 1, Beverly Hills, CA., Sage Publications.

Douglas, Mary, with Sir Gerald Barry, Dr. J. Bronowski, James Fisher and Sir Julian Huxley, (1964), Man in Society: Patterns of Human Organization, Garden City, New York, Doubleday.

Dror, Yehezkel, (1968), Public Policy Reexamined, San Francisco, Chandler Publishing.

_____, (1971), Design for Policy Sciences, Amsterdam, Elsevier.

Dunn, Edgar S., (1971), Economic and Social Development: A Process of Social Learning, Baltimore, Johns Hopkins University Press.

Dyckman, John W., (1969), "Guest Editor's Introduction", in Journal of the American Institute of Planners, 35:3, (Sept.), pp. 298-300.

Easton, David A., (1965), A Systems Analysis of Political Life, New York, John Wiley.

Eldredge, H. Wentworth, (ed.), (1975), World Capitals: Toward Guided Urbanization, New York, Doubleday/Anchor.

Emery, F.E., (1967), "The Next Thirty Years: Concepts, Models, Anticipations", Human Relations, XX:3, pp. 199-237.

_____, and E.L. Trist, (1965), "The Causal Texture of Organizational Environments", in Human Relations, XVIII:pp.72-94.

_____, _____, (1971), "Socio-Technical Systems", in H. Eric Frank, (ed.), Organization Structuring, London, McGraw-Hill, Chap. 4.

_____, _____, (1974), Towards a Social Ecology: Contextual Appreciations of the Future in the Present, New York, Plenum/Rosetta.

Erber, Ernest, (ed.), (1970), Urban Planning in Transition, New York, Grossman, (for the American Institute of Planners).

Etzioni, Amitai, (1968), The Active Society: A Theory of Society and Political Processes, New York, The Free Press.

_____, (1973), "Commentary on the Journal Forum: Foundations for a Radical Concept of Planning, by Stephen Grabow and Allan Heskin", in The Journal of the American Institute of Planners, 39:2, (Mar.), Washington, D.C., p. 107.

Euston, Andrew, (1981), "Urban Design Administration Comes to Town", in Dimensions, p. 34, quoted in Alan Waterhouse, (1983), "The Three-Dimensional City Revisited . . .", in Plan Canada, Ottawa, Canadian Institute of Planners, 23:3, (Dec.), p. 83.

Ewing, David W., (1977), "Discovering your Problem-Solving Style", in Psychology Today, II:7, (Dec.), p. 69 et seq.

Faludi, Andreas, (1973), Planning Theory, Oxford, Pergamon Press, Pergamon International Library of Science, Technology, Engineering and Social Studies.

Finnegan, Ruth, (1973), "The Comparative Analysis of Urban Development", Unit 2, The Process of Urbanization, The Open University, Bletchley, Bucks, (England).

Fletcher, R., (1956), "Functionalism as a Social Theory", in Sociological Review, no. 4, quoted in Ruth Finnegan, (1973), "The Comparative Analysis of Urban Development", Unit 2, The Process of Urbanization, The Open University, Bletchley, Bucks, (England).

Franz, Marie-Louise von, and James Hillman, (1979), Jung's Typology, Irving, Texas, Spring Pub., (4th. [corrected] printing).

Freeman, Bill, (1979), "John Sewell and the New Urban Reformers Come to Power", in Our Generation, 13:2, (Spring), pp. 5-13.

Friedman, Maurice, (1976), Martin Buber: The Life of Dialogue, Chicago, University of Chicago Press; (c. 1955), New York, Harper and Row.

Friedmann, John, (1969), "Notes on Societal Action", in Journal of the American Institute of Planners, 35:5, (Sept.), 311-318.

_____, (1973), Retracking America: A Theory of Transactive Planning, Garden City, N.Y., Anchor/Doubleday.

_____, and Barclay Hudson, (1974), "Knowledge and Action: A Guide to Planning Theory", in Journal of the American Institute of Planners, 40:1, (Jan.), pp. 2-16.

Friend, J.K., and W.N. Jessop (1969), Local Government and Strategic Choice: An Operational Research Approach to the Processes of Public Planning, London, Tavistock Publications; Beverly Hills, Sage.

Fromm, Erich, (1970), The Art of Loving, New York, Bantam Books, (35th printing), c. 1956.

Fuller, R. Buckminster, (1965), "Conceptuality of Fundamental Structures", in Gyorgy Kepes, (ed.), Structure in Art and Science, New York, George Braziller, pp. 66-68.

Gans, Herbert, (1967), The Levittowners: Ways of Life and Politics in a New Suburban Community, New York, Pantheon Books, Random House.

Garland, Kevin, (1984); "The Misunderstanding: Architecture and Urban Planning", in Section a, Montreal, 2:1, (Feb./Mar.), p.4.

Gaylin, Willard, et al., (1978), Doing Good: The Limits of Benevolence, New York, Pantheon Books.

Galantay, Ervin, (1970), "Reston, Virginia: A New Town", in G. Leinward and R. Schaetz, (eds.), The City as a Community, New York, Pocket Books, pp. 168-175.

Galbraith, John Kenneth, (1973), Economics and the Public Purpose, Boston, Houghton Mifflin, (3rd ed., 1976).

Gazzaniga, Michael S., (1972), "The Split Brain in Man", in Robert E. Ornstein, (ed.), The Nature of Human Consciousness: A Book of Readings, New York, Viking Press.

Geddes, Sir Patrick, (1968), Cities in Evolution, (new edit.), London, Ernest Benn.

Ghiselin, Brewster, (ed.), (1960), The Creative Process: A Symposium, New York, Mentor, 5th. printing, (c. 1952).

Gilligan, Carol, (1982), In a Different Voice: Psychological Theory and Women's Development, Cambridge, Mass., Harvard University Press.

Gillispie, Charles Coulston, (1970), The Edge of Objectivity: An Essay in the History of Scientific Ideas, Princeton, N.J., Princeton University Press, (c. 1960)

Glasgow, J., (1973), "In the Twilight of Authority the Obsessive Concern with Self: A Conversation with Robert Nisbet . . . ", in Psychology Today, 7:7, (Dec.), 43-49.

Glueck, Grace, (1985), "To Bouguereau, Art was Strictly 'The Beautiful'", in The New York Times, 6, January, p. H27.

Godschalk, David R., (ed.), (1974), Planning in America: Learning from Turbulence, Washington, D.C., American Institute of Planners.

Goist, Park Dixon, (1974), "Patrick Geddes and the City", in The Journal of the American Institute of Planners, 40:1, (Jan.), pp. 31-37.

Goodman, Paul and Percival Goodman, (1947), Communitas: Ways of Livelihood and Means of Life, New York, Random House (repub., 1960, Vintage).

Goodman, Robert, (1971), After the Planners, New York, Simon & Schuster.

Grabow, Stephen and Allan Heskin, (1973), "Foundations for a Radical Concept of Planning", in Journal of the American Institute of Planners, 39:2, (Mar.). Washington, pp. 106,108-114.

Green, Mark J., (1973), "The Corporation and the Community", in Ralph Nader and Mark J. Green, (eds.), Corporate Power in America, New York, Grossman, pp. 42-63.

Gruen, Victor, (1973), Centers for the Urban Environment, New York, Reinhold.

Gutman, Robert and David Popenoe, (eds.), (1970), Neighborhood City and Metropolis: An Integrated Reader in Urban Sociology, New York, Random House.

Haines, Joe, (1977), The Politics of Power, London, Cape.

Hampden-Turner, Charles, (1971), Radical Man: The Process of Psycho-Social Development, Garden City, N.Y., Anchor Books. Originally pub. by Schenkman, 1970.

_____, (1981), Maps of the Mind, New York, Collier Books.

Hanson, Kirk, (1977), "How Planners can get Support from the Local Business Community", in Planning, American Society of Planning Officials, Chicago, 43:3, (Mar.), p.3.

Harris, Britton, (1972), "Foreword", in Ira M. Robinson, (ed.), Decision-Making in Urban Planning: An Introduction to New Methodologies, Beverly Hills, Sage.

Hartshorne, Richard, (1939), The Nature of Geography, Chicago, University of Chicago Press.

Harrington, Michael, (1976), The Twilight of Capitalism, New York, Simon and Schuster.

Harvey, David, (1973), Social Justice and the City, Baltimore, Johns Hopkins University Press, (paperback edit., 1975).

_____, (1976), "Planning the Ideology of Planning", presented at Planning: Challenge & Response, a conference sponsored by the Center for Urban Policy Research, Rutgers University, New Brunswick, (Sept. 8,9), (mimeo).

Hatt, Paul K. and Albert J. Reiss, jr., (eds.), (1965), Cities and Society: The Revised Reader in Urban Sociology, New York, the Free Press, 6th printing (c. 1957).

Hayek, Friedrich von, (1944), The Road to Serfdom, London, George Routledge and Sons; repub., 1962, Routledge and Kegan Paul.

Hazlitt, Henry, (1969), Man vs. The Welfare State, New Rochelle, N.Y., Arlington House

Heffner, Richard D., (ed.), (1952), A Documentary History of the United States, New York, Mentor.

Henderson, Joseph L., (1964), "Ancient Myths and Modern Man", in C.G. Jung, (ed.), Man and His Symbols, Garden City, N.Y., Doubleday.

Heilbroner, Robert L., (1976), Business Civilisation in Decline, New York, W.W. Norton.

Hightower, Henry C., (1969), "Report: Planning Theory in Contemporary Professional Education", in Journal of the American Institute of Planners, 35:5 (Sept.), pp. 326-329.

_____, and Ted Rashleigh, (eds.), (1981), "Turbulence: How do Planners Respond?", in Plan Canada, 21:1, (Mar.), pp. 24-33.

Hillman, James, in Mary-Louise von Franz and James Hillman, (1979), Jung's Typology, Irving, Texas, Spring Publication (4th corrected printing).

Hoffer, Eric, (1980), The True Believer: Thoughts on the Nature of Mass Movements, New York, Time/Life; first pub. 1951, New York, Harper.

Horsbrugh, Patrick, (1965), Pittsburgh Perceived, Pittsburgh, PA., City of Pittsburgh Planning Department.

Hughes, H. Stuart, (1958), Consciousness and Society, New York, Vintage.

Hunt, Morton, (1982), The Universe Within: A New Science Explores the Human Mind, New York, Simon & Schuster.

Ingalls, John, (1976), Human Energy: The Critical Factor for Individuals and Organizations, Reading, Mass., Addison-Wesley.

Jacobi, Jolande, (1951), The Psychology of C.G. Jung: An Introduction with Illustrations, London, Routledge and Kegan Paul.

Jacobs, Allan, (1978), Making City Planning Work, Washington, D.C., American Planning Association.

Jacobs, Jane, (1961), The Death and Life of Great American Cities: The Failure of Town Planning, New York, Random House.

_____, (1969), The Economy of Cities, New York, Random House.

_____, (1984), Cities and the Wealth of Nations: Principles of Economic Life, New York, Random House.

Jakobson, Leo, (1970), "Toward a Pluralistic Ideology in Planning", in Ernest Erber, (ed.), Urban Planning in Transition, New York, Grossman Publishers, pp. 266-275.

Jansch, Erich, (1971), "Review of Warren C. Bennis, et al., (eds.), The Planning of Change, (2nd edit.)", in Policy Sciences, 2:2, (June), Elvisier, pp. 200-203.

Jaynes, Julian, (1978), The Origin of Consciousness in the Breakdown of the Bicameral Mind, Toronto, University of Toronto Press; originally pub., 1977, New York, Houghton Miflin.

Jencks, Charles, (1980), Post-Modern Classicism, London, Architectural Design, quoted in Alan Waterhouse, (1983), "The Three-Dimensional City Revisited . . . ", in Plan Canada, Ottawa, Canadian Institute of Planners, 23:3, (Dec.), p. 85.

Jones, Garth N., (1969), Planned Organizational Change: A Study in Change Dynamics, London, Routledge and Kegan Paul.

Judson, Horace Freeland, (1980), The Search for Solutions, New York, Holt, Rinehart and Winston.

Jung, Carl Gustav, (1962), L'homme à la découverte de son âme: Structure et fonctionnement de l'inconscient, (préfaces et adaptation par le docteur Roland Cahen), Paris, Petite Bibliothèque Payot.

_____, (1964), "Approaching the Unconscious", in C.G. Jung, (ed.), Man and His Symbols, Garden City, N.Y., Doubleday, pp. 18-103.

Jung, Carl Gustav, (1973), Four Archetypes: Mother/Rebirth/Spirit/Trickster, (trans. R.F.C. Hull), Princeton, Princeton University Press, Bollingen Series XX.

_____, (1976), Psychological Types, revision by R.F.C. Hull of trans. by H. G. Baynes of (1921) Psychologische Typen, Princeton, Princeton University Press, Bollingen Series XX.

Kalba, Kas, (1974), "Postindustrial Planning: A Review Forward", in Journal of the American Institute of Planners, 40:3, (May).

Kapuscinski, Ryszard, (1984), The Emperor, (trans. William R. Brand and Katarzyna Mroczkowska-Brand), London, Picador, (Pan Books).

Kaufmann, Walter, (1980), Discovering the Mind: Freud versus Adler and Jung, Vol. III, New York, McGraw-Hill.

King, James O., Sigurd Grava, and David Seader, (1974), "Letter to the Editor", in The Journal of the American Institute of Planners, 40:1, (Jan.), p. 54.

Koestler, Arthur, (1954), Arrow in the Blue: An Autobiography, London, Readers Union, Collins and Hamilton.

Knack, Ruth Eckdish, (1984), "Staking a Claim on Urban Design", in Planning, Chicago, American Planning Assoc., 50:10, (Oct.), pp. 4-11.

Konrad, George, (1977), The Citybuilder, New York, Harcourt Brace Jovanovich.

Krumholtz, Norman, (1982), "A Retrospective View of Equity Planning: Cleveland 1969-1979", in Journal of the American Planning Association, 48:2, (Spring), pp. 163-174, repub. in Donald A. Kreuckeberg, (ed.), (1983), Introduction to Planning History in the United States, New-Brunswick, N.J., The Center for Urban Policy Research, Rutgers University, Chap. 12.

Kuhn, Thomas S., (1970), The Structure of Scientific Revolutions, Chicago, University of Chicago Press, (2nd. edit.).

Kusner, M.E., (1977), "Analyzing Urban Literature", in Forum, Ottawa, Canadian Institute of Planners, 14:1, (Mar.), p. 3.

Langdon, Philip, (1984), "The Legacy of Kevin Lynch", in Planning, Chicago, American Planning Association, 50:10, (Oct.), pp. 12-16.

Lash, Harry, (1977), Planning in a Human Way, Toronto, Macmillan, (for MSUA), (1st edit., 1976).

Lawrence, Paul R., and Jay W. Lorsch, (1967), Organization and Environment: Managing Differentiation and Integration, Boston, Graduate School of Business Administration, Harvard University.

Lee, Douglas B., jr., (1973), "Requiem for Large Scale Models", in The Journal of the American Institute of Planners, 39:3, (May), pp. 163-178.

_____, (1974), "Rejoinder to Letters to the Editor", in The Journal of the American Institute of Planners, 40:1, (Jan.), pp. 56,57.

Le Baron, Bentley, (1974), "Marx on Human Emancipation", in David P. Shugarman, (ed.), Thinking about Change, Toronto, University of Toronto Press.

Leshan, Lawrence, (1974), The Medium, the Mystic and the Physicist: Toward a General Theory of the Paranormal, New York, Viking, (an Essalen Book), c. 1966.

Le Roy, Edouard, (1929), La Pensée intuitive: Au-delà du discours, Paris, Boivin,

Levinson, Leonard Louis, (1963), The Left Handed Dictionary, New York, Collier.

Lewis, C. Day, (1961), "The Making of a Poem", in Richard Thruelsen and John Kobler (eds.), Adventures of the Mind, New York, Vintage (c. 1959).

Lewis, Harold, (1974), "Public Participation in Planning", in Arnold Whittick, (ed.), Encyclopedia of Urban Planning, New York, McGraw-Hill, pp. 850-852.

Lewis, Oscar, (1959), Five Families: Mexican Case Studies in the Culture of Poverty, New York, Basic Books, repub. by New York, Newton.

Likert, Rensis, (1967), The Human Organization: Its Management and Value, New York, McGraw-Hill.

Limonchik, Abe, (1982), "The Montreal Economy: The Drapeau Years", in Dimitrios Roussopoulos, (ed.), The City and Radical Social Change, Montreal, Black Rose Books, pp. 179-206.

Loeb, Louis E., (1981), From Descartes to Hume: Continental Metaphysics and the Development of Modern Philosphy, Ithaca/London, Cornell University Press.

Lorimer, James, (1972), A Citizen's Guide to City Politics, Toronto, James Lewis & Samuel.

_____, and Evelyn Ross, (1976), The City Book: The Planning and Politics of Canada's Cities, Toronto, James Lorimer & Co.

Luthe, Wolfgang, (1976), Creative Mobilization Technique, New York, Grune & Stratton.

Lynch, Kevin, and Malcolm Rivkin, (1959), "A Walk around the Block" in Landscape, Vol. 8, pp. 24-34; reprinted in Proshansky, Ittelson and Rivlin (eds.), 1970, Environmental Psychology: Man and His Physical Setting, New York, Holt, Rhinehart & Wilson, pp. 631-641.

_____, (1960), The Image of the City, Cambridge, Mass., MIT and Harvard University Press.

Lynd, Robert M., and Helen Lynd, (1929), Middletown, New York, Harcourt, Brace & Co.

_____, (1937), Middletown in Transition, New York, Harcourt, Brace & Co.

Magee, Bryan, (1974), Popper, London, Woburn Press.

McHarg, Ian, (1969), Design with Nature, Garden City, N.Y., The Natural History Press.

McLoughlin, J. Brian, (1969), Urban & Regional Planning: A Systems Approach, London, Faber & Faber.

_____, and Judith N. Webster, (1970), "Cybernetics and System Approaches to Urban and Regional Research: A Review of the Literature", in Environment & Planning, Vol. 2, pp. 369-408.

McLuhan, Marshal, (1977), "PSI in the Global Village: Toward a Post-Electronic Age", Keynote speech, International Symposium of Life, Death and Psychic Research, International Institute of Integral Human Sciences, Concordia University, Montreal, (Mar. 4), (mimeo).

Mann, Lawrence, (1970), "The Fuzzy Future of Planning Education", in Ernest Erber, (ed.), Urban Planning in Transition, New York, Grossman, (for the American Institute of Planners).

Mannheim, Karl, (1940), Man and Society in an Age of Reconstruction: Studies in Modern Social Structure, London, Kegan Paul, Trench, & Trubner; (repub. 1949, New York, Harcourt).

_____, (1950), Freedom, Power, and Democratic Planning, New York, Oxford University Press.

Markusen, J.R., and D.T. Scheffman, (1977), Speculation and Monopoly in Urban Development: Analytical Foundations with Evidence for Toronto, Toronto, University of Toronto Press.

Mayer, Albert, (1974), "United States of America", in Arnold Whittick, (ed.), Encyclopedia of Urban Planning, New York, McGraw-Hill.

Max-Neef, Manfred A., (1967), "Integral and Social Planning for the Challenge of Tomorrow's World", Proceedings of the Annual Conference of the Town Planning Institute of Canada, Montreal, (mimeo).

Mill, John Stuart, (1875), Autobiography, London.

Moholy-Nagy, Sybil, (1969), The Matrix of Man: An Illustrated History of Urban Environment, New York, Praeger, (2nd printing).

Morley, David, (ed.), (1981), "Management in Turbulent Environments", in Contact: Journal of Urban and Regional Affairs, 13:1, Faculty of Environmental Studies, University of Waterloo, Waterloo, Ont..

Morris, Charles R., (1980), The Cost of Good Intentions: New York City and the Liberal Experiment, 1960-1975, New York, Norton.

Moore, Charles, (1973), in John W. Cook and Heinrich Klotz, (eds.), Conversations with Architects, New York, Praeger.

Mumford, Lewis, (1974), "Patrick Geddes", in Arnold Whittick, (ed.), Encyclopedia of Urban Planning, New York, McGraw-Hill, pp. 441-443.

Nader, George A., (1975), Cities of Canada, Vol. I, "Theoretical, Historical and Planning Perspectives", Toronto, Macmillan of Canada.

Nash, Peter H.J., Sr., (1972), "Planning Icons: Apollonian and Dionysian", presented at 55th Annual Conference, American Institute of Planners, Boston, (Oct. 9), (mimeo).

Nietzsche, Friedrich, (1967), The Birth of Tragedy or: Hellenism and Pessimism, New York, Vintage, (trans. and commentary, Walter Kaufmann).

Odyniec, Faran, (1977), "The Banks Become Good Citizens", in Planning, American Society of Planning Officials, Chicago, 43:3., (Mar.).

Onibokun, Adepoju G., (1974), "Evaluating Consumers' Satisfaction with Housing: An Application of a Systems Approach", in Journal of the American Institute of Planners, 40:3, (May), pp. 189-200.

Ornstein, Robert E., (1974), "The Brain's Other Half", in The New Scientist, (June 6), pp. 606-608.

Paul, Leslie, (1953), The English Philosophers, London, Faber & Faber.

Pears, D. F., (1966), "Causes and Objects of some Feelings and Psychological Reactions" in Stuart Hampshire, (ed.), Philosophy of Mind, New York, Harper & Row, pp. 143-168.

Peattie, Lisa R., (1968), "Reflections on Advocacy Planning", in Journal of the American Institute of Planners, 34:2, (Mar.), pp. 80-88.

Perloff, Harvey S., (1971), "Review Forum" in Journal of the American Institute of Planners, 37:2, (Mar.), pp. 119-12.

Perloff, Harvey S., and Frank Klett, (1974), "The Evolution of Planning Education", in David Godschalk, (ed.), Planning in America: Learning from Turbulence, Washington, D.C., American Institute of Planners, pp. 161-180.

Peterson, Jon A., (1983a), "The Impact of Sanitary Reform upon American Urban Planning, 1840-1890", in Donald A. Kreuckeberg, (ed.), Introduction to Planning History in the United States, New Brunswick, N.J., The Center for Urban Policy Research, Rutgers University, pp. 13-39.

_____, (1983b), "The City Beautiful Movement: Forgotten Origins and Lost Meanings", in Donald A. Kreuckeberg, (ed.), Introduction to Planning History in the United States, New Brunswick, N.J., The Center for Urban Policy Research, Rutgers University, pp. 40-57.

Pirsig, Robert M., (1975), Zen and the Art of Motorcycle Maintenance: An Inquiry into Values, New York, William Morrow, Bantam, (9th printing), (c. 1974).

Popkin, R.H., and A. Stroll, (1956), Philosophy Made Simple, Garden City, N.Y., Doubleday.

Popper, Karl Raimund, (1969), Conjectures and Refutations, London, Routledge & Kegan Paul.

_____, (1971), The High Tide of Prophecy: Hegel, Marx and the Aftermath, Vol. 2 of The Open Society and Its Enemies, Princeton, N.J., Princeton University Press, (originally pub. 1945, London, Routledge and Kegan Paul).

_____, (1972), Objective Knowledge: An Evolutionary Approach, Oxford, Oxford/Clarendon Press.

Price, Henry H., (1958), "Belief", in Encyclopaedia Britannica, Vol.3, pp. 368-369.

Price, Lucien, (1954), Dialogues of Alfred North Whitehead, New York, Mentor.

Qadeer, Mohammud A., (1974), "Research Report: Local Land Market and a New Town: Columbia's Impact on Land Prices in Howard County", in Journal of the American Institute of Planners, 40:2, (Mar.), pp. 110-123.

Ratcliffe, John, (1975), An Introduction to Town & Country Planning, London, Hutchinson.

Reich, Charles A., (1971), The Greening of America, New York, Bantam, (first pub. 1970, Random House).

Reissman, Leonard, (1964), The Urban Process: Cities in Industrial Societies, New York, Free Press.

Remmling, Gunter W., (1975), The Sociology of Karl Mannheim, Atlantic Highlands, N.J., Humanities Press.

Rheinstein, Max, (ed.), (1967), Max Weber on Law in Economy and Society, (trans., Edward Shils, Max Rheinstein, from Max Weber, (1925), Wirtschaft und Gesellschaft), New York, Simon & Schuster.

Richards, J.M., (1962), An Introduction to Modern Architecture, Harmondsworth, Middlesex, Pelican, (revised edit., first pub. 1940).

Robinson, Ira M., (ed.), (1972), Decision-Making in Urban Planning: An Introduction to New Methodologies, Beverley Hills, London, Sage.

Rodwin, Lloyd, (ed.), (1961), The Future Metropolis, New York, George Braziller.

Roszak, Theodore, (1975), Unfinished Animal: The Aquarian Frontier and the Evolution of Consciousness, New York, Harper and Row.

Royal Town Planning Institute, Journal of the, (1981), The Planner and Self-Help, (entire issue). 67:3, (May/June), London, England.

Rudofsky, Bernard, (1964), Architecture without Architects: A Short Introduction to Non-Pedigreed Architecture, Garden City, N.Y., Doubleday.

Safdie, Moishe, (1970), Beyond Habitat, (ed. John Kettle), Montreal, Tundra.

Schneira, T.C., (1958), "Comparative Psychology", in Encyclopaedia Britannica, Vol. 18, pp. 690-708.

Schon; Donald, (1971), Beyond the Stable State, New York, Random House.

Sharon, A., (1951), Physical Planning in Israel, Jerusalem.

Simmie, J.M., (1974), Citizens in Conflict: The Sociology of Town Planning, London, Hutchinson, (The Open University).

Singer, June, (1973), Boundaries of the Soul: The Practice of Jung's Psychology, Garden City, N.Y., Doubleday/Anchor.

Slater, Philip, (1974), Earthwalk, Garden City, New York, Anchor/Doubleday.

Smith, Peter F., (1974), The Dynamics of Urbanism, London, Hutchinson.

So, Frank S., (1984), "Strategic Planning: Reinventing the Wheel?", in Planning, Chicago, American Planning Association, 50:2, (Feb.), pp. 16-21.

Soleri, Paulo, (1977), Arcology: The City in the Image of Man, Cambridge, Mass., MIT Press, (c. 1969).

Stebbing, L. Susan, (1948), Thinking to Some Purpose, Harmondsworth, Middlesex, Pelican Books.

Stein, Maurice R., (1965), The Eclipse of Community: An Interpretation of American Studies, New York, Harper Torchbooks, Harper & Row, (2nd printing), (c. 1960).

Steinberg, Saul, (1961), "Steinberg on the City", Journal of the American Institute of Planners, 27:3, (Aug.), pp. 247-292.

Stern, Barbara Lang, (1982), "Woman's Intuition: Learn to Trust your Instincts", in Vogue, (May), p. 105.

Sternlieb, George, (1971), "Review Forum", in Journal of the American Institute of Planners, 37:2, (Mar.), pp. 116-119.

Strong, Anne Louise, (1971), Planned Urban Environments: Sweden, Finland, Israel, the Netherlands, France, Baltimore, Johns Hopkins Press.

Thompson, William Irwin, (1971), At the Edge of History: Speculations on the Transformation of Culture, New York, Harper & Row.

_____, (1972), "The Mechanists and the Mystics", in Time, New York, (Aug. 21), pp. 42-44.

Toronto, City of, [1984], Dreams of Development, Records and Archives Division.

Tuan, Yi-Fu, (1974), Topophilia: A Study of Environmental Perception, Attitudes and Values, Englewood Cliffs, N.J., Prentice-Hall.

Tunnard, Christopher, (1963), "The Customary and the Characteristic: A Note on the Pursuit of City Planning History", in Oscar Handlin and John Burchard, (eds.), The Historian and the City, Cambridge, Mass., MIT Press and Harvard University Press.

Tyrwhitt, Jacqueline, (ed.), (1947), Patrick Geddes in India, London, Lund Humphries.

Udy, John M., (1984), Jung and Healthy ? An Exploration of the Relationship Between Jung's "Compass of the Psyche" and the Planning Profession, presented at the Annual Conference of the American Planning Association, Minneapolis, Minn., (8 May), (mimeo).

Urban Design Centre, The, (1973), The Layman's Home Improvement Guide, Vols. 1-4, Vancouver, B.C.

Urban, W.M., (1958), "Theory of Value", in Encyclopedia Britannica, Vol. 22, pp. 962-964.

Venturi, Robert, and Denise Scott Brown, (1973), in John W. Cook and Heinrich Klotz, (eds.), Conversations with Architects, New York, Praeger, pp. 247-266.

Walker, Frank B.,(1977), "A Study of Power", in The Montreal Star, (Apr.16), p.C3.

Waterhouse, Alan, (1983), "The Three-Dimensional City Revisited: Political Economy in Urban Design Practice", in Plan Canada, Ottawa, Canadian Institute of Planners, 23:3, (Dec.), pp. 81-90.

Webber, Melvin M., John W. Dyckman, Donald L. Foley, Albert Z. Guttenberg, William L.C. Wheaton and Catherine Bauer Wurster, (1964), Explorations into Urban Structure, Philadelphia, University of Pennsylvania Press.

Westcott, Malcolm R., (1968), Toward a Contemporary Psychology of Intuition: A Historical, Theoretical and Empirical Inquiry, New York, Holt, Rinehart and Winston.

Wetmore, Louis B., (1970, "Preparing the Profession for its Changing Role", in Ernest Erber, (ed.), Urban Planning in Transition, New York, Grossman.

Wheelwright, Joseph B., Jane H. Wheelwright, John A. Buehler, (1964), Jungian Type Survey: The Gray-Wheelwrights' Test Manual, San Francisco, Society of Jungian Analysts of Northern California, (16th rev.).

White, Morton, (1956), The Age of Analysis: 20th Century Philosophers, New York, Mentor.

White, Sara, and Nancy Schamberg, (1984), "Planners on the Hill", in Planning, Chicago, American Planning Association, 50:10, (Oct.), pp. 24-28.

Whitehead, Alfred North, (1955), Adventures of Ideas, New York, Mentor, The New American Library, (c. 1933, Macmillan).

Whittick, Arnold, (ed.), (1974), The Encyclopedia of Urban Planning, New York, McGraw-Hill.

Wild, K.W., (1938), Intuition, Cambridge, The University Press.

Wilmers, Peter, (1981), "Planning, Self-Help and Mutual Aid", in The Planner, Journal of the Royal Town Planning Institute (Britain), 67:3, (May/June), p. 59.

Wilson, William H., (1983), "Moles and Skylarks", in Donald A. Kreuckeberg, (ed.), Introduction to Planning History in the United States, New Brunswick, N.J., The Center for Urban Policy Research, pp. 88-121.

Winkler, Franz E., (1960), "Man: The Bridge between Two Worlds", New York, Harper & Brothers.

Wirth, Louis, (1938), "Urbanism as a Way of Life", in American Journal of Sociology, Vol. 44, pp. 1-24, reprinted in Louis Wirth, (1956), Community Life and Social Policy, quoted by Leonard Reissmann, (1964), The Urban Process: Cities in Industrial Societies, New York, Free Press, pp. 139-142.

Wolfe, Jeanne M., (1981), Who Plans, Part IV: Comments, Montreal, McGill University, School of Urban Planning, (personal communication).

Wolfe, Tom, (1981), From Bauhaus to our House, Toronto, McGraw-Hill Ryerson; New York, Farrar Straus Giroux.

Wolfenden Committee, The Report of the, (1978), The Future of Voluntary Organizations, London, Croom Helm.

Woolger, Roger, (1983), personal correspondence to this author, (13 Sept.).

Wright, Frank Lloyd, (1963), The Future of Architecture, New York, Mentor, (The New American Library).

Wrigley, Robert L., (1983), "The Plan of Chicago", in Donald A. Kreuckeberg, (ed.), Introduction to Planning History in the United States, New Brunswick, N.J., The Center for Urban Policy Research, Rutgers University, pp. 58-72.

APPENDICES

APPENDIX A

SELECTED REFERENCES TO BIFURCATIONS RELATED TO FUNCTIONAL DIFFERENCES IN THE HEMISPHERES OF THE BRAIN

The following notes support Chart 3, (page 36), in the text. Authorities listed in the chart are alluded to in the same order as in the chart.

As interpreted by Maurice Friedman, (1960), and Hampden-Turner, (1961), the importance of the Hasidic philosopher, Martin Buber, (1958),[1] is in "his challenge to the Enlightenment . . . [in terms of] the domination of the I of the investigator over the it of the investigated . . . ", (Hampden-Turner, ibid.,124). In Friedman's interpretation of Buber's view, "[t]he meaning of what is communicated cannot be defined by one party, it must be discovered through dialogue", (ibid.), i.e. the I-Thou mode. "Buber is saying that social and

---

[1] It is not clear that these interpretations match Buber's intentions. Ronald Gregor Smith, an early translator of Buber's I and Thou, (1958), notes that while writers in many fields have found Buber's thought "congenial and illuminating", many have "simply made . . . use of his distinctions and categories", (Buber, 1958:vii). This is not so surprising when one finds that, according to Walter Kaufmann, a later translator, (Buber, 1970:24), "[t]he style of Ich und Du . . . represents a late flowering of romanticism and tends to blur all contours in the twilight of suggestive but extremely unclear language. Most . . . German readers would be quite incapable of saying what any number of passages . . . mean . . . . It is not even impossible that in places Buber himself was not sure of the exact meaning of his text." There is even equivocation between these two translators as to Buber's central theme, (Buber, 1958:ibid; Buber, 1970:38). No wonder, then, that Friedman and Hampden-Turner should be inspired by, rather than slavishly quote Buber. Nevertheless, the fact that they adhere to the idea expressed by the first words of Buber's text, that "the world is twofold for man in accordance with his twofold attitude", (Buber, 1970:53), and that "this twofoldness runs through the whole world, through each person, each human activity", (Buber, 1958:ix), together with the fact that the terms "I-It, I-Thou" are inextricably linked to Buber's name, motivated its retention here.

psychological concepts need to be defined inclusively of one another, rather than, as at present, exclusively", (ibid.):

> Du with its simultaneity, spontaneity, harmony, wholeness and guidance by facial recognition, has all the characteristics of right-hemisphere brain functioning, while I-It is predominantly left-hemisphere .... I-It connotes the world of cause and effect, our persistent itch to make some part of the process of dialogue into a master switch that controls it all. (Hampden-Turner, 1981:126).

Thomas Kuhn, the historian of science, recognizes two modes of scientific discovery, (ibid.,190), again resembling the right and left hemisphere thought processes. By far the most common is the left hemisphere mode---what he calls "normal science". This consists essentially in "puzzle-solving", (Kuhn, 1970:35). Exactness is the key to success; knowledge is developed empirically and grows incrementally under the aegis of "The Paradigm", Kuhn's term for a "universally accepted scientific achievement", (ibid.,viii). The paradigm, once accepted by the scientific community, is highly resilient. Scientific revolutions are rare and are resisted. "Scientists do not normally aim to invent new theories and are intolerant of those who do", (ibid.,24). For some time, anomaly will be tolerated as just another puzzle of Normal Science, but if it persists, more and more attention is paid to it, until it becomes the subject matter of the discipline, (ibid.,82).

When that rare event, the scientific revolution, (i.e. paradigm switch), occurs, the mode of scientific research changes dramatically to a right hemisphere mode, following quite closely, a pattern observed by the philosopher of science, Karl Popper. For Popper, scientific discovery is based initially on the clear articulation of a problem, which inspires a tentative theory. Subjected to error elimination, this leads to the defining of a new problem (Popper, 1976:132,

1972:144). To Popper, all theory is conjecture, to be exposed to attempts at refutation, (Popper, 1969:115). To be a worthy paradigm, it must, like Einstein's, embrace both the previous paradigm and the anomalies that led to the recognition of its inadequacies. Thus "Niels Bohr's concept of complementarity arose when apparently conflicting results in elementary particle physics forced an expansion of the frame of reference of classical physics", (Blackburn, 1972:128).

To summarize the work of Getzels, Jackson and Hudson, "Divergence is the making in the mind of many from one. Convergence is the making of one from many", (Hampden-Turner, ibid., 104). Creativity involves both. Beginning with divergent thinking, creative persons will intuit when the necessary ingredients for a new synthesis are present, and switch to convergent thinking. "Unfortunately our society is divided by crude stereotypes of the Two Cultures: the humanities are idealized as divergent, the sciences as convergent .... The present gap between the Two Cultures robs both halves of significance", (ibid.).

"Vertical thinking" according to de Bono, is to think logically and sequentially, in the mode of the left hemisphere. "Lateral thinking" is the free association and pattern-making of the right hemisphere, (ibid., 108). "(W)hile vertical thinking is superficially active ... it is psychologically passive, a pattern highly resistant to change .... Only lateral thinking can bring us back to the realization that we are self-organizing systems, pattern-making creatures, not just pattern recognizers and imprint followers", (ibid.,111), (see also, Pirsig, 1974:306).

Deikman presents a model "in which psychological and physiological variations are viewed as manifestations of two basic organismic states or modes that are coordinated to a particular function", (Deikman, 1972:68). These are

the "action" mode and the "receptive" mode. The first is organized to manipulate the environment. "The principal psychological manifestation of this state are focal attention, object-based logic, heightened boundary perceptions and the dominance of formal characteristics over the sensory .... Sharp perceptual boundaries are matched by sharp conceptual boundaries, for success in acting on the world requires a clear sense of self object difference", (ibid.).

"In contrast, the receptive mode is a state organized around intake of the environment rather than manipulation. The sensory-perceptual system is ... dominant .... Other attributes ... are diffuse attending, paralogical thought processes, decreased boundary perception and the dominance of the sensory over the formal", (ibid.,69).

Deikman notes that language is at the heart of the action mode, since it enhances the ability to discriminate, analyze, divide up the world into pieces that can be grasped and acted on, (ibid.,70). He also draws attention to Buber's "I-It"/"I-Thou" dichotomy, (q.v.), as characteristic of the action/reception modes, respectively, (ibid.,71). In his view, the basic choice of mode is culturally motivated, the action-mode dominating in the West, (ibid.). In contrast, eastern Zen teaching is "aimed specifically at doing away with categorizing and classifying", including a sense of time, (ibid.,77).

The Princeton University psychologist, Julian Jaynes, (1976), has put forward the intriguing idea, that consciousness as we know it, is barely 3,000 years old. Prior to this, our ancestors, like today's schizophrenics, processed information intuitively, through the hallucinatory area of the right temporal lobe, which also issued commands, heard as the voices of the Gods, through the Anterior Commissure to "Wernicke's area" in the left hemisphere (ibid., 104 et seq.). "Jaynes believes that ... the whole known world of theocratic god-kings,

prior to 1500 BC was possessed of a bicameral mind, split in two, with a right hemisphere, executive part called a god, and a left hemisphere, follower part, called man", (Hampden-Turner, ibid.,90), (see Jaynes, ibid., 149, 202,203).

According to David Bakan, a York University psychologist, the schism between Catholicism[2] and Protestantism is characterized by their each clinging to opposed social modes: in the case of Catholicism, it is "community"; in the case of Protestantism, "agency". "Each has been haunted by the surfeit of its preferred value", (Hampden-Turner, 1981:36). In the case of Catholicism, "the person is part of an organic hierarchy . . . rooted in kinship, feudal loyalties, neighbourhood, animals and land . . . . God is experienced as mystery in many dimensions, in ritual, community, sacrament, awe, ascetism, and participation, by way of Mary and the saints", (ibid.,34). In contrast, Protestantism, guided by "earthly agents of God's will---The Puritan Saints, placed no limit on the zeal or thoroughness of its exercise and extension. It followed that the heirs of Calvinism---capitalism, positivism, scientism---have likewise displayed overweening agentic powers, repressing that concern with community which might have qualified their runaway technologies", (ibid.,36).

Ghiselin's anthology on The Creative Process, provides corroboration of hemispherical differences in the form of Einstein's contribution: "the psychical entities which seems to serve as elements in thought are . . . visual and some of muscular type. Conventional words or other signs have to be sought for laboriously only in a second state . . .", (in Ghiselin, 1960:43).

---

[2] Bakan links Anglicanism with Catholicism, in terms of their shared world outlook, and their mutual differences with most Protestant faiths.

Nietzsche (1967), has noted that at the time of the Alexandrian empire, Dionysus became accepted as equal to his polar opposite, Apollo, among the Delphic gods. Nash (1972), describes the contrasts: while Apollonians were "balanced, rational, nomothetic, temperate, restrained, meditative, orderly, measured and striving for harmony", (in other words, thoroughly left-hemisphere-dominated), Dionysians were "sensuous, irrational, passionate, frenzied, unbounded, lawless, ecstatic and involved, pregnant with strength and creative striving", (or thoroughly right-hemisphere-dominated in their approach to life), (see Chart 1, p. 191).

Eventually, primitive, orgiastic Dionysianism evolved spiritual communities practising "sober drunkenness", based on music, meditation and love. According to Buonaiuti (1937:237), the monasticism of the Middle Ages could be viewed as a revival of these pre-Christian communities. And when one considers the resurgent interest nowadays, in "music, meditation and love", it is little wonder than Thompson (1971:147), senses an imminent recreation of the Ionas and Lindisfarnes of mediaval monasticism.

McLuhan (1977), suggests that traditional Western emphasis on the left-hemisphere mode is due to the Western alphabet, while the right-hemisphere mode is linked with the ideograph, the intuitive mind and with the "old religion". The West has been in the thrall of left hemisphere conceptualization since Rome conquered most of the ancient world, with its lineal, orderly, and sequential militarism, road building, bureaucracy and legal system. Before Rome, as in the Third World of today, all humanity was oriented to right-hemisphere thinking.

Pre-Roman alphabets such as that of the Babylonians, were, like that of the Chinese, ideographic. Predictably, they did not have the same cultural

CHART 7: Apollonian & Dionysian Characteristics

(after Nash, 1972)

APOLLONIAN (left hemisphere)	DIONYSIAN (right hemisphere)
Balanced	Passionate
Nomothetic	Lawless
Temperate	Involved
Restrained	Ecstatic
Meditative	Sensuous
Orderly & measured	Unbounded
Striving for Harmony	Striving for Creativity

effect as that of Rome. Babylonian cuneiform is a medium with a very different message; one that is hierarchical, rigid, static and centred on a priestly and mystical bureaucracy. Ancient peoples, of which the Babylonians seem typical, were not self-conscious; nor it seems, were they capable of thought processes as we left-hemisphere people understand them. They were, instead, prone to "auditory hallucinations" of the kind now being investigated by parapsychologists. A growing interest in parapsychology is only one indication of a vast changeover that is taking place in western thinking.

At the same time, McLuhan points to the fact that east is meeting west, in response to the transistor and the Sputnick, for the "non place urban realm" of the electronic age of which Webber (Webber et al., 1964:79-153), speaks, is one that is open to right-hemisphere-dominated peoples.

Thus it would seem there has been a move away from a world which, since the Romans, has been fundamentally divided in its styles of thinking. No longer is the West almost totally dominated by the left hemisphere of the brain.[3] Nor do deviations within this general tendency follow each other sequentially as they seem to have in the past. Now, simultaneously, both ways of thinking need to be promoted. This view is summed up succinctly by James Bryant Conant:

---

[3] Of course this domination has rarely been exclusive. It is probably true to say that there have always been social mutations manifesting a contrary orientation.

> A free society requires . . . two types of individuals: the one prefers the empirical-inductive method of inquiry; the other the theoretical-deductive outlook. Both modes of thought have their dangers; both have their advantages. In any given profession, in any single institution, in any particular country, the one mode may be underdeveloped or overdeveloped; if so, the balance will need redressing. Above all, the continuation of intellectual freedom requires a tolerance of the activities of the proponents of the one mode by the other.
> (Conant, 1965:xxi).

Writing in the early seventies, Blackburn drew attention to the growth of a counter-culture the salient feature of which was "its epistemology of direct sensuous experience, . . . subjectivity, and respect for intuition---especially intuitive knowledge based on 'naive' openness to nature and to other people", (Blackburn, 1972:28). The technological culture which this movement ran counter to was based on "the scientist's quantifying, value-free orientation---[which] has left him helpless to avoid (and often a willing partner in) the use of science for exploitative and destructive ends", (ibid.,27).

Francisco Varela, a recent American emigré from Chile, has suggested that right hemisphere thinking can be seen as a "net", in contrast to a left hemisphere "tree", (Hampden-Turner, ibid., 192). "[T]he idea of a "net" or cybernetic feedback loop, [is] a kind of Garden of Eden where harmony reigns but consciousness is lost; and the idea of a 'tree', which persons create whenever they make parts of their mind, e.g. their bodies, behaviours and techniques, the servants of their conscious purpose or self", (ibid.).

Christopher Alexander, the architect and mathematician, uses "tree" in a similar way, to describe the simplistic, hierarchic pattern of discreet units designers use to plan an "artificial" city, (new town), while the slow-growing, "natural" city develops on the basis of a "semi-lattice", which embraces "overlap, ambiguity, [and] multiplicity of aspect", (Alexander, 1965:58). Again, the "tree"

has the hallmark of left hemisphere thinking, whereas the semi-lattice could be associated with the right.

APPENDIX B

INTUITION & FEELING: RATIONAL OR IRRATIONAL PROCESSES ?

> I would like to see psychologists explain their work a little more carefully than they have. I wish better maps were drawn.
> Isaac Asimov

Introduction

Based on a personal need to define the ways in which his outlook differed from that of Freud and Adler, his one-time colleagues, Carl Gustav Jung developed over a period of twenty years as a practising psychologist, the idea of there being four primordial psychological types, each with a distinctive orientation to the world, to people and to things. Reflecting on the genesis of the idea in his later years, Jung recounts as follows:

> I had always been impressed by the fact that there are a surprising number of individuals who never use their minds if they can avoid it, and an equal number who do use their minds, but in an amazingly stupid way. I was also surprised to find many intelligent and wide-awake people who lived (as far as I could make out) as if they had never learned to use their sense organs .... There were others who ... seemed devoid of all imagination, and they entirely and exclusively depended upon their sense-perception. (Jung, 1964:60,61)

From such observations, Jung was led to formulate what he latterly referred to as "The Compass of the Psyche". People oriented themselves primarily by one of four ways: by either thinking, feeling, sensation or by intuition. People who <u>thought</u> applied their mental faculties to adapt to circumstances. Less obviously logical were, according to Jung, the equally rational individuals who do not think as such, but found their way by <u>feeling</u>. In

the sense that Jung uses the word, feeling is akin to evaluation: a judgement of value, (ibid.,61). In popular usage, feeling and intuition appear almost synonymous, but Jung draws a distinction. Feeling, as he defines it, is like thinking, a rational, ordering function. In contrast, an intuition is an "irrational", perceiving action: "In so far as intuition is a 'hunch', it is not the product of a voluntary act; it is an involuntary event, which depends upon different external or internal circumstances instead of an act of judgement", (ibid.). Sensation, i.e. perception via the senses, is equally irrational, since, Jung argues, it is dependent primarily on external stimuli and not on internal mental exertion.

This paper stems from a personal impression that Jung may have been in error in his definition of intuition and feeling, as respectively irrational and rational. Although by any definition, intuition is not a consciously rational process, intuitions often appear rational and reasonable. One might therefore conjecture that the unconscious seems, in the intuitive act, to have leapt ahead of a conscious rational process, but notwithstanding, comes up with a response which does no offense to that process and indeed may often be considered even a necessary and integral part of it. Thus intuition, far from being irrational, may easily be seen as a subliminal rational process.

In contrast, feeling has all the hallmarks of irrationality. Firstly, the dictionary[1] records the common bond between "feeling" and "sensing", and even more tellingly, defines feeling as "the subjective reactions . . . that one may have to a situation . . . ", and finally, that it "usually connotes an absence of

---

1 Webster's New World Dictionary of the American Language, College Edit., ca. 1960.

reasoning". Circumstantial evidence would therefore seem definitely to support the view proposed here, that intuition is rational and feeling is irrational.

Perhaps, however, this is too facile a judgement. Jung's views on the matter, first published in Psychologische Typen in 1921, were never altered in subsequent printings and translations, and remain unchanged in its abbreviated exposition in Man and His Symbols, published with Jung's approval, around the time of his death, in 1964. Furthermore, those describing Jung's typology have either blandly reported on this aspect without comment[2], or have discreetly avoided mentioning it[3]. None of the ten sources, cited below, saw fit to find fault with it.

That apparently no one else has challenged Jung on this point over sixty years suggest temerity on the part of this reader, but for the fact that the tenacity of the idea may be explained in a number of ways which do not have logic as their basis. Firstly, few, it seems, who are not Jungians have found reason to consider Jung's hypothesis in any depth.[4] For Jungians, there may be a number of explanations. The matter may have been overlooked, it being peripheral to their concerns, or because they are disinterested in the precise use of language. (Jungians, after all, are not linguistic philosophers, but psychologists struggling to express the ineffable). Alternatively, it may be an uncritical acceptance of theory, either as an act of faith, or simply, that the

---

2 Cadwallader, (1980: 350-352); Cox (1968: 103); Fordham (1968: 40, 43); Hall and Norby (1973: 99); Hillman, in Franz and Hillman (1979: 90,91); Franz, ibid., 1); Singer, (1973:191); Jung, (adapt. Cahen), (1962:95-97).

3 Hampden-Turner, (1981: 44); Jacobi (1951: 30 et seq.).

4 Kauffman's plea for a reassessment of Freud, Jung and Adler, (1980), mentions Psychological Types, but his critique is shallow and misconstrued, (e.g. compare Kauffman, 1980:297 with Franz, ibid., 49), and never touches the functional types problem, as such.

ambiguity has not been noticed since it has not interfered with the practical application of the theory of psychological types as such. In short, the longevity of Jung's conceptualization is not reason enough for aquiescent acceptance; there is room---even a need---for respectful challenge, for objective analysis.

This present inquiry takes the form of an assessment of the characteristics Jung associates with each of his four functional types in their extravert mode. (As will be explained, introverted versions are not relevant to the context). The remaining two of the four types (Thinking and Sensation) are examined briefly, since "feeling" and "intuition" are also defined by what they are not. This also provides an opportunity to review Jung's descriptions comparatively. The source is Chapter X of Jung's Psychological Types.

This will be followed by supplementary information from Chapter XI of the same source. Jung has appended here quite elaborate definitions of his terminology. Furthermore, in the First Princeton/Bollingen Paperback printing, (1976), four papers on psychological typology, written and presented at conferences by Jung between 1913 and 1936, are included as an appendix. Particular statements made in one of these will be singled out for reference in our critique of Jung's concept of feeling. The views of Marie-Louise von Franz and James Hillman, (1979) prominent Jungians who have elaborated on the subject of psychological types, will also be referred to in this section, and elsewhere.

Jung wrote, in his foreword to the first Swiss edition, that his "concern is . . . to show how the ideas I have abstracted from my practical work can be linked up, both historically and terminologically, with an existing body of knowledge" (ibid., xi), and indeed, the first 330 pages of the book are devoted to

this end. Unfortunately, his efforts in this regard do not explore the problem of definition outlined above. Thus, it seems desirable to contrast the writings of Jung and Jungians with a survey of how others have written specifically about the nature of intuition, (the case for defining "feeling" resting with Jung, Hillman and von Franz).

Considering the nature and time-frame of this essay[5], it is obvious that this study will not be exhaustive, and the erudition of Wild (1938) and of Westcott (1968) in particular, have proved useful. These two researchers were able to devote an extended number of years to their work, and produced compendia of many of the theoretical concepts of the nature and functions of intuition. Though carried out for purposes other than those to be explored here, they provide much useful groundwork, and a point of departure. Beyond Wild and Westcott, there is reference in particular to Ghiselin's anthology, The Creative Process, (1960), the most important source for evidence of personal experience of intuition.

The juxtaposition of these various points of view is undertaken with a view to finding responses to the following question: Does the evidence point to Jung (and the Jungians) being in error in their categorization of intuition as "irrational" and feeling as "rational", and if it does, does this have the effect of undermining the whole Psychological Types concept?

---

5 The matter is of considerable intrinsic interest, but in the context of this thesis, its investigation is not of central importance. As such, to devote much more than a semester to it would have been out of scale with its significance here.

Section I: Jung's Four Extraverted Psychological Types: A Critique

Exposition of Type Attributes in Chapter X

In Jung's general description of types, (Jung,1976:Chap.X), he first recognizes two "attitude" types: the Introvert and the Extravert. These categories differentiate between the direction of interest. Secondly, Jung describes four functional types, (which can be either extravert or introvert): thinking, feeling, sensing, and intuition.

The extravert's "interest and attention are directed to objective happenings, particularly those in the immediate environment", (ibid.,334). Both people and objects "seize and rivet his[1] attention," (ibid.), thereby determining his actions. In contrast, introverts, although aware of external conditions, "select the subjective determinants as ideas into imagery. Accordingly, visions of numerous possibilities appear on the scene, but none of them ever becomes a reality, until finally images are produced which no longer express anything externally real, being mere symbols of the ineffable and unknowable", (ibid.,381,382).

Evidently, as Jung himself affirms, "[f]or our present-day culture the extraverted attitude to the problem of human relationships is the principle that counts; naturally the introverted principle occurs too, but it is still the exception and has to appeal to the tolerance of the age", (ibid.,373). In any event, few introverts, as here defined, would be attracted to the field of urban and regional

---

[1] As will be evident from some of the quotations which follow, Jung links certain types preponderantly with one sex or the other, but he also uses "he" or "his" in the generic sense, as in this case.

planning as a career, and fewer still would be equipped to pass the qualifying examinations. We may therefore in this context, leave aside the introverts, to concentrate attention on Jung's extravert functional types.

Extraverted thinking is based on objective data transmitted by sense-perception, (ibid.,342), but "need not necessarily be purely [sic] concretistic thinking; it can just as well be purely ideal thinking, (ibid.):

> [All Thinkers'] activities [are] dependent on intellectual conclusions . . . orientated by objective data, whether these be external facts or generally accepted ideas. This type . . . elevates objective reality, or an objectively oriented intellectual formula, into the ruling principle . . . . By this formula good and evil are measured, and beauty and ugliness determined . . . . If the formula is broad enough, this type may play a very useful role in social life as a reformer or public prosecutor or purifier of conscience, or as a propagator of important innovations. But the more rigid the formula the more he develops into a martinet, a quibbler, and a prig, who would like to force . . . [everyone] into one mould. (ibid.,346,347).

The majority of thinkers, according to Jung, vary between these two extremes.

The feeling extravert "is always in harmony with objective values", (ibid.,354). "[V]aluations resulting from the act of feeling either correspond directly with objective values or accord with traditional and generally accepted standards", (ibid.,355). According to Jung, such types "are almost without exception, women", (ibid.,356) who are extremely conventional, in their choice of mate, recreation, etc., who keep thinking "in abeyance as much as possible", (ibid.,357).

In summarizing the characteristics shared by rational or judging types, (i.e. thinking and feeling), Jung points to "a deliberate exclusion of everything irrational and accidental. Rational judgment, in such a psychology, is a force

that coerces the untidiness and fortuitousness of life into a definite pattern, or at least tries to do so", (ibid.,360).

The extraverted sensation type is

> the lover of tangible reality, with little inclination for reflection and no desire to dominate . . . . [H]e has no ideals connected with ideas . . . [and therefore] has no reason to act in any way contrary to the reality of things as they are . . . . Once an object has given . . . a sensation, nothing more remains to be said or done about it. It cannot be anything except concrete or real; conjectures that go beyond the concrete are admitted only on condition that they enhance sensation.
> (ibid.,364)

However, Jung later adds that for this type, "sensation . . . is not a mere reactive process . . . but an activity that seizes and shapes it", (ibid.,366).

Similarly, for the intuitive extravert, "intuition is not mere perception, or vision, but an active, creative process that puts into the object as much as it takes out", (ibid.). Paraphrased, Jung describes the intuitive extravert as follows:

> [I]ntuition tries to apprehend the widest range of possibilities, since only through envisioning possibilities is intuition fully satisfied . . . . The intuitive is never to be found in the world of accepted reality-values, but he has a keen nose for anything new and in the making. Because he is always seeking out new possibilities, stable conditions suffocate him . . . . Thinking and feeling, the indispensable components of conviction, are his inferior functions . . . . The intuitive's morality is governed neither by thinking nor by feeling; he has his own characteristic morality, which consists in a loyalty to his vision and in voluntary submission to its authority . . . . Consideration for the welfare of others is weak . . . . Many tycoons, entrepreneurs, speculators, stockbrokers, politicians, etc. belong to this type . . . (but the intuitive type) would appear to

---

2 This remark is actually inconsistent with Jung's own theory. In the way that he has constructed the "Compass of the Psyche", Sensation is the inferior function of the Intuitive, and thinking and feeling are secondary or supplementary functions, (see Jung, 1964:60).

> be more common among women . . . than among men . . . . If his intentions are good, i.e., if his attitude is not too egocentric, he can render exceptional service as the initiator or promoter of new enterprises. He is the natural champion of all minorities with a future . . . . His capacity to inspire courage or kindle enthusiasm is unrivalled . . . . He brings his vision to life, he presents it convincingly and with dramatic fire, he embodies it so to speak. But this is not play-acting, it is a kind of fate.
> (ibid.,367-369).

Jung groups sensers and intuitives together as "extraverted irrational" types since for them, "perception is directed simply and solely to events as they happen, no selection being made by judgement", (ibid.,370). However, he does not regard them as "unreasonable", but "in the highest degree 'empirical'", since "[t]hey base themselves exclusively on experience. . . . ", (ibid.,371).

To facilitate the analysis of Jung's psychological types, summarized in these excerpts, above, Chart 8 has been constructed to bring out the key characteristics in succinct form. The statements of characteristics culled from Jung's descriptions are preceded by the letter used in the Jungian Type Survey (Wheelright et al., 1972) to represent the types, followed by a lower-case letter to allow quick reference when reading the commentary that follows.

Critique

Thinker Characteristics

That thinking may be either concrete or ideal (Ta), and that thinkers wish to impose their thought patterns on others (Td) seems generally true. However, the other statements purporting to describe the Thinker seem initially at odds with Jung's own descriptions. The measurement of good and evil, beauty and ugliness, etc. (Tb) seems by Jung's own definition, to be more a basic Feeler charac-

CHART 8: SYNOPSIS OF JUNG'S EXPOSITION OF EXTRAVERTED TYPES

Source: Jung, Carl Gustav, (1976), Psychological Types, Princeton U. Press

(T) Extraverted Thinker:
Ta. Either concrete or ideal thinking (p. 342)
Tb. Elevates objective reality or intellectual formula into a ruling principle by which good and evil, etc., are measured. (p. 346)
Tc. May be a reformer, public prosecutor, purifier of conscience, propagator of innovation. (p. 346)
Td. May become dogmatic and coercive. (p. 347)

(F) Extraverted Feeler:
Fa. Valuations correspond to objective values, traditional or generally accepted standards. (p. 355)
Fb. Almost without exception, conventional women. (p. 356)

(F/T) Extraverted Feeler & Thinker:
F/Ta. Rational judgement excludes the irrational or accidental. (p. 360)
F/Tb. Coerces the untidiness and fortuitousness of life into a definite pattern. (p. 360)

(S) Extraverted Senser:
Sa. Disinclined to reflect; no wish to dominate. (p. 364)
Sb. Objects alone are concrete and real. (p. 364)
Sc. Conjectures beyond the concrete admitted only if they enhance sensation (p. 364)
Sd. Actively seizes and shapes sensation (p. 366)

(U) Extraverted Intuitive:
Ua. Tries to apprehend the widest range of possibilities. (p. 367)
Ub. Never in the world of accepted reality values. (p. 368)
Uc. Keen nose for anything new or in the making. (p. 368)
Ud. Stable conditions suffocate him/her. (p. 368)
Ue. Morality governed by personal vision. (p. 368)
Uf. Consideration of welfare of others is weak. (p. 369)
Ug. Are often business tycoons, speculators, stockbrokers, politicians. (p. 369)
Uh. Initiator/promoter of new enterprises. (p. 369)
Ui. Inspires courage, kindles enthusiasm. (p. 369)
Uj. Dramatic in style, but not play-acting. (p. 369)
Uk. Most commonly women (p. 369)

(S/U) Extraverted Senser & Intuitive:
S/Ua. Irrational, i.e. perceptive of events as they happen, with no selection being made by judgement. (p. 370)
S/Ub. Not unreasonable, but empirical, since they base themselves exclusively on experience. (p. 371)

teristic than one to be associated with the Thinker. But surely Jung could not be guilty of so fundamental an error. Perhaps one can interpolate that the systematic approach to such matters as aesthetics or ethics are beyond the capabilities of feelers, and necessitate the thinking mentality. However, this interpretation is refused by Hillman (Franz, Hillman, ibid.,91).

One might also question whether thinking is particularly associated with "the reformer, public prosecutor, purifier of conscience, [or] propagator of innovation", (Tc). There seems no valid reason that such occupations be exclusively or even primarily associated with Thinkers. On the contrary, Feelers, with their primary concern for value, seem more likely candidates for all except "innovator". This latter appears more akin to attributes ascribed to the Intuitive, (i.e. Uc, Uh, Ui, and Uj).

Feeler Characteristics

Von Franz, "perhaps his [Jung's] closest professional confidante and friend", (Freeman, in Jung, 1964:ii), points out that Psychological Types "is one of Jung's earlier books. When he wrote it, he was in many respects struggling in the dark", (Franz, 1979:1). This fact is no more apparent than in his description of the Feeling type. Although it is not stated unequivocally, Jung seems to strongly imply that virtually all Extravert Feelers are women, (Fb).[3] Hillman softens the blow by suggesting Jung's statement "may be taken as an observation of our society, but not as a psychological law", (Hillman, ibid.,97). Nevertheless, the

---

3 This is also Jung's position vis-à-vis Introverted feelers, (see ibid. p. 388), as well as extraverted intuitives.

empirically observed feminine affinity colours Jung's attitude to the Extravert Feeler, such that he devotes almost the entire description to portraying Feelers as females, (see Jung, ibid.,356-359), especially those with a highly conventional outlook, (Fa). No doubt this was Jung's clinical observation, and may well be true of some Feelers, but can it be reasonably assumed to be true of all?[4] The problem here seems to be related to extrapolating a general categorization from a skewed sample, namely his patients.

Those characteristics Jung attributes to both Thinker and Feeler (F/Ta, F/Tb), both seem questionable. The first embraces the subject of this essay and is still to be proven one way or the other; the second (F/Tb) does not seem to be entirely exclusive to these types. Since Sensers "actively seize and shape" what they sense, (Sd), they too would appear to be pattern-makers.

The Senser Characteristics

All four statements concerning the Senser are quite straightforward. Taking into account that Jung tends, logically enough, to be thinking in terms of individuals of this type, his statements seem to support my understanding of the type as a group. The idea that the Senser "actively seizes and shapes the sensation", (Sd), is particularly appealing, as it implies the Senser's role within the planning profession, of putting into some kind of order what the senses are telling the senser; an important attribute insofar as my own research and conceptualization is concerned. Its similarity to F/Tb has already been noted above.

---

[4] For an initial attempt to answer this question, see Appendix E.

The Intuitive

Judging from the many more substantive statements made in this section, as compared with the others, Jung seems particularly interested in this type. (Could it be that he is an Intuitive?) The attributes of unconventionality (Ub), innovativeness (Uc, Uh), restlessness (Ud), personal vision (Ue), and charisma (Ui, Uj) accord well with my apprehension of the characteristics of the Intuitive, (and of Jung himself).

The three remaining statements raise some questions , however. They seem to imply that Jung sees the Intuitives almost exclusively as egocentric opportunists, (Ug, Ua), with low concern for others, (Uf). Whereas Jung develops a convincing argument for accepting such types as being in this category, it would be surprising if these rather sinister figures should be the only ones associated with this type. Nor do these negative characteristics appear generally to be exclusive to this type.

It is difficult to comprehend the meaning of Jung's summary characteristics of the two "irrational" types. "No selection being made by judgement", (S/Ua), is perhaps an exaggeration to make a point, since it is hard to accept as such. Surely some kind of a priori selection is operative in everyone's perception of the world. Besides the statement seems to conflict with Jung's final statement, (S/Ub), to the effect that though these types are "irrational", they are nonetheless capable of reasoning, notwithstanding that they base it on "experience". Finally, it is hard to understand how an unreflective person is able to "apprehend the widest range of possibilities", (Ua).

Exposition of Attributes in Chap. XI

In brief, the discursive descriptions, just reviewed, have very apparent weaknesses. Coverage of each type is uneven, and there seem to be discrepancies and overlaps. It is thus with eagerness that one turns to the next chapter of Psychological Types, (Chap. XI), devoted to a glossary of his terminology.[5]

His definition of sensing neither adds nor detracts from his description in Chap. X, and since this seems to our satisfaction, it need not be pursued further. However, the definitions of the other three types bear scrutiny. Of particular interest is his definition of "Thinking", excerpted below:

> THINKING
>
> Thinking: Thinking may be divided into active and passive thinking. Active thinking is an act of will . . . a voluntary act of judgement; in the latter [i.e. passive thinking] conceptual connections establish themselves of their own accord, and judgements are formed that may even contradict . . . intention[s] . . . . I would call it [this kind of thinking] intuitive thinking.
>
> The capacity for directed thinking [i.e. via the will] I call intellect; the capacity for passive or undirected thinking I call intellectual intuition. Further, I call directed thinking a rational (q.v.) function, because it arranges the contents of ideation under concepts in accordance with a rational norm of which I am conscious. Undirected thinking is in my view an irrational (q.v.) function, because it arranges and judges the contents of ideation by norms of which **I am not conscious and therefore cannot recognize as being in accord with reason.** Subsequently I may be able to recognize that the intuitive act of judgement accorded with reason, although it came about in a way **that appears to me** irrational.

---

[5] It should be noted that here, Jung defines the functions, not the types as such, but it is clear, that as Jung believes that "everyone whose general attitude . . . is oriented by intuition belongs to the intuitive type", (ibid.,454), hence, one can assume that this is so in every other case as well.

> [In] thinking that is governed by feeling (q.v.) . . . **the laws of logic are** ostensibly present; in reality they are **suspended in favour of the aims of feeling.**
> (ibid.,481, 482; original emphases underlined, boldface this author's emphasis)

Critique

This definition is both surprising and revealing. Of particular importance is Jung's recognition of intuitive thinking and intellectual intuition, distinguished from "active", wilful thinking and intellect only by the fact that the former cannot be immediately recognized as following the laws of reason, and therefore appear irrational. Even though this is only appearance, Jung still denies intuition the dignity of rationality. In contrast, feeling, which he counts as rational, he recognizes as only paying lip-service to the laws of logic. His definitions of the forms of intuition and feeling, are consistent with this definition and with each other, and are thus equally unreasonable.

INTUITION:

> Intuition: The peculiarity of intuition is that it is neither sense perception, nor feeling, nor intellectual inference, **although it may also appear in these forms.** In intuition a content presents itself whole and complete, without our being able to explain or discover how this content came into existence . . . . Concrete intuition mediates perceptions concerned with the actuality of things, abstract intuition mediates perceptions of ideational connections. Concrete intuition is a reactive process, since it responds directly to the given facts; abstract intuition . . . needs a certain element of direction, an act of will, or an aim . . . . It [intuition] stands in a compensatory relationship to sensation and, like it, is the matrix out of which thinking and feeling develop as rational functions. Although intuition is an irrational function, many intuitions can afterwards be broken down into their component elements and their origin thus brought into harmony with the laws of reason.
> (ibid.,453,454, original emphasis underlined, boldface emphasis by this author.)

Critique

The first sentence of this "definition" is particularly baffling, since here Jung allows that intuition may be sensing, feeling or thinking, although he stoutly denies that this is what it is, to him at least. Expressed as a positive statement, the meaning seems more clear: "Although intuition may sometimes appear as sense perception, feeling, or intellectual inference, it is also something apart, and I use the term in this latter, particular sense". Notwithstanding, the second sentence does not seem to impart this exclusivity. The qualifications of "concrete" and "abstract" merely indicate what intuitions may be about, without shedding light on what they are. In fact, throughout this explanation, Jung seems to be fighting a rearguard action (with limited success) against the conclusion that there is anything peculiar about intuition except its immediacy and inexplicability. The final sentence is really a capitulation. Despite his dogged determination to term intuition as irrational, he admits that many (if not most?) actually respond to the laws of reason. This seems not a little unreasonable on his part.

FEELING:

> Feeling: . . . is an entirely subjective process, which may be in every respect independent of external stimuli . . . . [It] is a kind of judgement, differing from intellectual judgement in that its aim is not to establish conceptual relations but to set up a subjective criterion of acceptance or rejection . . . . In the same way that thinking organizes the contents of consciousness under concepts, feeling arranges them according to value . . . . Feeling, like thinking, is a rational . . . function, since **values in general are assigned according to the laws of reason . . . .**
>
> (T)he above definitions do not give the essence of feeling--- They only describe it from the outside. The intellect proves incapable of formulating the real nature of feeling in

> conceptual terms, since thinking belongs to a category incommensurable with feeling; in fact, no basic psychological function can ever be completely expressed by another. (ibid., 433, 435; original emphasis underlined; this author's emphasis in boldface).

Critique

The final phrase of Jung's first paragraph expresses a crucial point. Are values, as he asserts, assigned in general according to "the laws of reason"? Jung himself does not define "values", so we must look elsewhere. According to one authority, (Urban, 1958: 963), the psychological theory of value states that they are "a determination of quality of an object which involves any sort of appreciation or interest . . . (including) feeling and ultimately desires or tendencies". These are classified "according to modes of . . . interest . . . (which are) ultimately biological and genetic, the outstanding classes being connected with some fundamental 'instinct' or tendency". None of this lends support to Jung's contention, assuming, of course, that by "laws of reason", he is referring to the rules of logic, or perhaps Platonic truth, or simply objective assessment. However, when we review what Jung means by "rational", below, we will see that he means none of these things. The final phrase of the second paragraph is in a sense, Jung's apologia for the incompleteness of his definitions, though by no means is it a full explanation.

My own views accord with those of Henry Murray, quoted by Kaufmann (1980: 308). Though referring specifically to the attitude types, (extraversion and introversion), his comments hold equally true for these functional types as well:

> Considered in toto Jung's description of type differences are most insightful, richer in anecdote and reference and more suggestive theoretically than anything else that is to be found in the literature of personology. It is, therefore, particularly unfortunate that he did not systematically set down in one

> place a condensed list of what he considered to be the crucial indices . . . . This would have clarified his position . . . . [A]mid the abundant illuminations in Jung's book, one runs afoul of many vague metaphors, confusions and contradictions. (Murray, 1938)

Nevertheless, his definitions of what he means by "rational" and "irrational", (below), do at least shed some light on their differences from the standard dictionary definitions, and thus, help to clarify his meaning.

RATIONAL:

> Rational: . . . the reasonable, that which accords to reason . . . . [The] principle [of rationality] is to conform thought, feeling, and action to objective values . . . [which are] established by the everyday experience of external facts . . . and of inner, psychological facts . . . . The rational attitude . . . permits us to declare objective values as valid . . . not [to] . . . the individual subject, but [to] . . . human history . . . . Human reason, accordingly, is nothing other than the expression of man's adaptability to average occurrences . . . thus the laws of reason . . . designate and govern the average, 'correct', adapted attitude . . . . Everything is 'rational' that accords with these laws, everything that contravenes them is 'irrational' (q.v.). (ibid., 458,459)

Critique

This is a startlingly narrow view of rationality. In essence, Jung views it as "nothing other" than the ability to conform to "objective" values, which he sees as empirical and quotidian in nature; a faculty that allows one to adapt to the conventions of the time. Without doubt, "a reasonable belief is one that accords with the evidence", and that evidence is to some extent, a product of the Zeitgeist, such that, (for instance), "it was reasonable for primitive man to believe that the sun was much smaller than the earth [since] the evidence which they had supported that proposition", (Price, 1958: 369). But there is an extremely important complementary attribute of rationality: the ability to

"utilize . . . reasoning capacity to plan---that is, to combine and appropriately rearrange whole systems and sequences of reasoned and learned processes with reference to some goal", (Schneira, 1958: 705). One wonders by what means civilization has progressed beyond primal perceptions, other than by reasoning beyond the conventions of a particular time.

The reason for Jung's peculiarly narrow definition of rationality becomes clear when one realizes that the latter attributes he denies to rationality are those which he (rightly) attributes particularly to intuition, (see Chart 8, Ua,Uc,Ud, Uh, page 204). Thus it would appear that he would sell rationality short rather than admit that intuition is rational.

IRRATIONAL:

> I use this term not as denoting something contrary to reason, but something beyond reason, something, therefore, not grounded on reason . . . . The irrational . . . may be pushed further and further out of sight by an increasingly elaborate rational explanation, [but this] finally makes the explanation so complicated that it passes our powers of comprehension . . . . [T]hinking is a directed function, and so is feeling . . . . When these functions are concerned . . . with the perception of accidentals . . . they at once lose the attribute of directedness and, with it, something of their rational character . . . and . . . [are] therefore irrational . . . . [T]hinking and feeling . . . find their fulfilment only when . . . in complete harmony with the laws of reason.
> (ibid., 454, 455; emphasis in the original)

Critique

It seems quite likely that the term "irrational" has been badly rendered into English, for the dictionary definition definitely ascribes the meaning as being contrary to reason, and not, as Jung wishes to propose, simply beyond reason. One might therefore better substitute the term "supra-rational"

whenever Jung uses the term "irrational"; alternatively the word "perception" or even "apprehension" (as opposed to "comprehension") might better indicate Jung's meaning. The rest of Jung's "definition" does not shed much light on the subject. Apart from recognizing what appears "irrational" may yield in time to rational explanation, (I believe he is using the word in its usual sense here), and that thinking and feeling may go beyond what he narrowly construes as the "laws of reason", we are little the wiser for this explanation.

. . . . . .

We have now completed our review of Jung's own exposition of the meaning of intuition and feeling, and other attributes which reflect on this. Let us now turn our attention, first to other views of intuition, (Section II), followed by quotations, (Section III); then to a more lengthy critique of Jung's conception of feeling, (Section IV), ending with our own conclusions, (Section V).

Section II : Other views of Intuition Contrasted with those of Jung

"The gift which enables a woman to arrive instantly at an infallible and irrevocable decision without the aid of reason, judgement or discussion". This is how intuition is defined in Levinson's Left Handed Dictionary, (1963). It exemplifies the position of intuition in the popular mind - - - a double jeopardy, for it is as condescending toward intuition as it is toward women. Elfie Stock Raymond[1] phrases this supercilious attitude thus: "In the politics of everyday language, 'intuition' often has been used scornfully to connote a subrational faculty that yields the only knowledge available to nitwitted people who cannot command reason", (quoted by Stern, 1982).

Of course Jung is by no means as crass as this. He seems to have made a conscientious effort to give stature to intuition but his intuited sense of the term[2], as being much more than simply the characteristic mental stance of highly conventional and intellectually weak women, seems to have been stunted by the paucity or at least the skewness of his preparation.[3]

---

1 Chairperson, Philosophy Dept., Sarah Lawrence College.

2 This may be to give Jung credit where it is not entirely due. The editors of the 1976 edition of Psychological Types, in a footnote (p. 454) give unequivocal credit to Mary Moltzer, an early student, then associate of Jung's as "having discovered the existence of this [intuitive] type", though nowhere does Jung himself acknowledge this. If the editors are correct, the initial intuition, at least, is Moltzer's, not his.

3 The first 330 pages (nine chapters) of Psychological Types involves the research and analysis stage of the work. Judged by volume, it would appear more than adequate, but the fact is that it is entirely devoted to the exposition of earlier typologies, which he compares (often

As has been amply illustrated by many of those who have researched or themselves experienced the phenomenon, (see numerous examples in Section III), intuition, (not to mention plain induction), is heavily dependent on the right kind and quality of prior research. If Jung's research, before or since the initial publication of Psychological Types, had been no broader nor more profound than that undertaken here, it would have shown that intuition was not to be so easily detached from reason.

He would have found that serious consideration of the subject goes back to the roots of western philosophy, to Plato. According to Westcott, (1968), the ancient philosophical understanding of the function of intuition was as a means for acquiring knowledge of "ultimate reality". Such knowledge, Plato thought, was to be attained from ideas, which were the result of intuition operating on conceptions, these latter stemmed from the inductive processing of information from the sensual world, (ibid., 5).

Modern philosophic concepts of intuition were variations on this theme. They stem from the writing of Descartes, Locke and Hume, according to Westcott. To them "ultimate reality consisted . . . of immediately present ideas and impressions . . . to be known through intuition" (ibid.). In contrast, Kant

---

disparagingly) with his own. There is no research on the characteristics of each type as such, thus one can only assume such characteristics were induced or intuited from the distorted mirror of his professional practice, supplemented by general observation. He says as much in the foreword of the first Swiss edition: "My concern is . . . to show how the ideas I have abstracted from my practical work can be linked up, both historically and terminologically, with an existing body of knowledge . . . ".
(Jung,ibid.,xi).

claimed that we impose "forms of intuition", (e.g. temporal and spatial features), on everything we are in contact with, in order to make recognizable patterns of "things-as-they-appear", (Popkin and Stroll, 1956:96,97).[4] For Bergson, intuition was a process somewhere between instinct and intellect. Intellectualization is an evolutionary development, he thought, beneficial from the point of view of survival, in that it allows the translation of "prime reality" into discreet objects, events and processes. But in so doing, the "dynamic flux" of "prime reality" is distorted and obscured. Only through intuition can the dynamic flux be apprehended, but this apprehension is difficult to communicate to others, (ibid., 7-9; see also White, 1955: 67).

So serious concern for discovering the nature of intuition has a long precedence, and while philosophic interest in the subject has waned with the advent of scientism in recent years, (Cadwallader, 1980: 352, 353), it continues in the social sciences[5] and the arts. And not only is this theorizing, there are numerous reports of personal experience of the phenomenon. Allowing for a

---

[4] Cadwallader's interpretation (1980: 353) is not dissimilar. She recognizes that for Descartes, "intuition was the auxiliary function which guided intellect," (see also, Loeb, 1981: 37 et seq), and that Spinoza, Leibnitz, Kant and Hegel were also of this opinion. But Locke, Berkeley and Hume are, in her words, "their mortal enemies". As Empiricists, it is true that they were in an entirely different philosophical tradition; one could hardly categorize them as Intuitive types. Nevertheless, all three accept intuition as a basic faculty, (see Loeb, ibid., 60, 359), providing first premises. Locke goes further than the other two, to accept that "...sometimes the mind [intuitively] perceives the agreement of two ideas immediately", (see Berlin, 1956: 88), in other words to accept the discriminating aspect of intuition, common to the modern use of the word.

[5] However, it is also under attack here by the "psychometrists" (see Westcott, ibid., 185).

certain latitude in meaning[6], or metaphoric description, experience essentially corroborates theory.

Not counting Jung, this author has uncovered forty-one people---fourteen philosophers, ten artists, seven scientists and ten social scientists---who have either theorized about, or experienced the phenomenon, (but note p. 222n). Granted the list is not exhaustive, I would invoke Occam's razor, and suggest they are reasonably representative.[7]

As witness the quotations in Section III, and their summarization in Charts II and III, following, the evidence clearly shows that while the aim, nature and characteristics of intuition as a phenomenon may vary somewhat from person to person,[8] a relationship of some kind with this phenomenon and the reasoning process is overwhelmingly ratified. One can do no better than to quote in full, a

---

6 Wild cites thirty-one definitions of intuition (see Section V), but most concern individual attributes or unusual or careless usage. Of more value is Beveridge's simple, but fairly comprehensive definition: "a sudden enlightenment or comprehension of a situation, a clarifying idea which springs into the consciousness, often, though not necessarily when one is not thinking of that subject" (Beveridge, 1950: 91). This covers most situations, except those of some artists, where the intuition may embrace an entire oeuvre (see Mozart, Beethoven, Coleridge, etc. in Section III). In any event, since the function of this paper is to discover whether or not there is a common bond between intuition (how ever defined) and reason, the niceties of definition need not detain us.

7 Specifically excluded are those artists and mystics who reject rational thought entirely, (the artist who works directly and uncritically with his medium; the mystic exclusively with his visions and voices). Although their muse may be "intuition", it is of a highly introverted esoteric and atypical type, and therefore not relevant to our present discussion which is limited to extraverted types.

8 This may be more apparent than real. In some cases, it may be due to incomplete knowledge of all a particular individual has written on the subject; in others, the individual may just not have been conscious of a particular factor. Partial information suffices in this case, since the matter is not central to the specific interest here.

prime authority on the subject, K.W.Wild, as witness to Jung's aberration on this point:

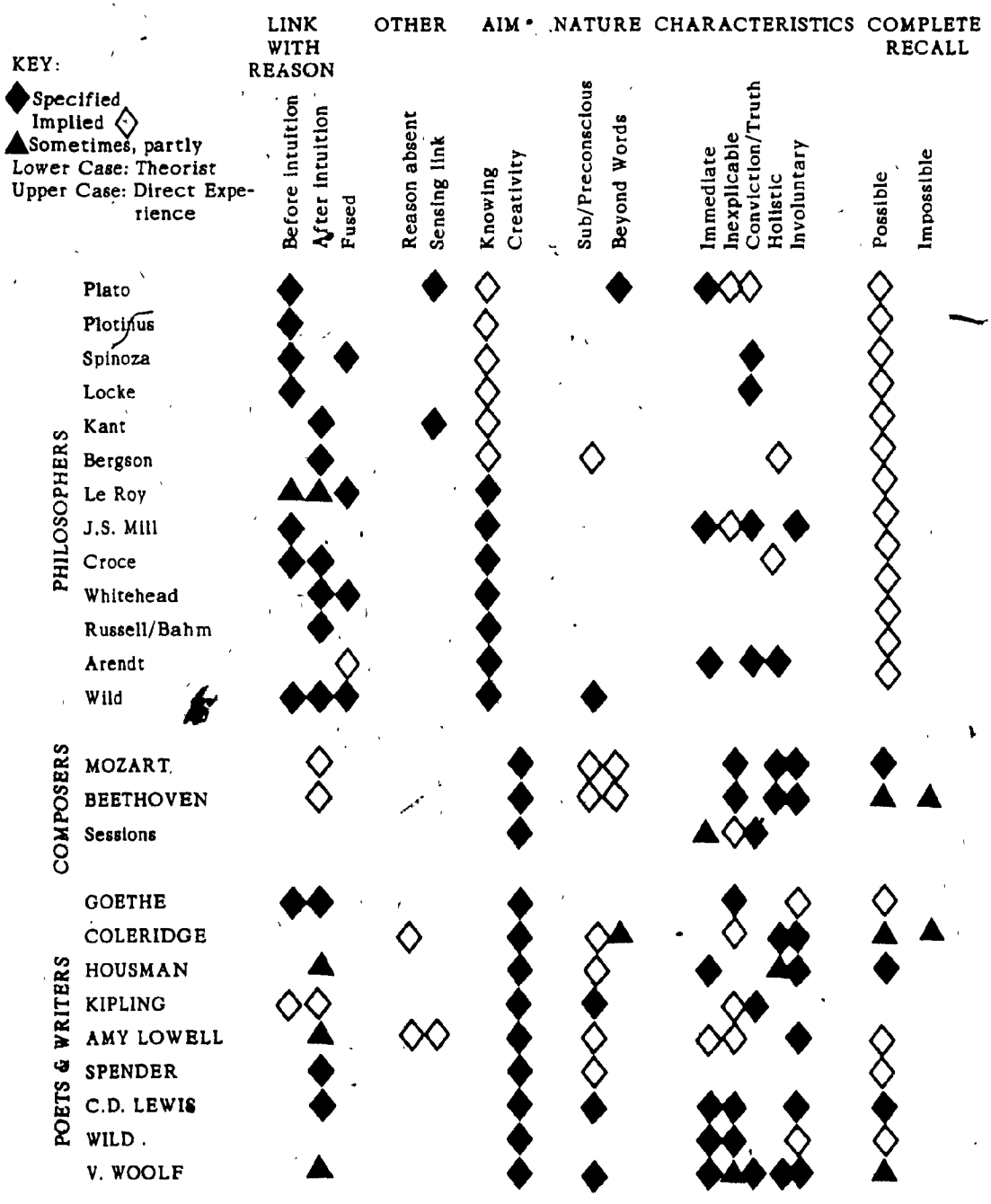
> It seems to me that the confusion lies in the definition of intuition. It is not really as described by Jung, perception at all. It is, it seems to me, judgement, unconscious judgement, or judgement so rapid as to appear unconscious. Intuition 'peers round the corners of sensation' so as to see what is suitable to the situation. The perception of the realities, the balances, the harmonies of complexes, or what is wrong or lacking in order to get the balance or harmony, is really a judgement that a rearrangement, an addition, a subtraction is necessary; and so the creative tendency Jung insists upon as characteristic of the intuitive type .... [I]f we are right and Jung's intuition is rapid judgement ... it is a variety of intellect, and the type a variety of the rational thinking type, where the success of thought depends on keenness of perception rather than laborious deductions .... Perhaps this form of judgement is distinct enough from other forms to deserve a separate name ....
> (Wild, 1938: 62)

I would agree with Wild. The Intuitive is primarily rational and not primarily perceptive. I would at the same time take her option for the Intuitive type as being distinctive enough to be recognized as deserving a separate name. Although 83 percent of all scientists polled by Platt and Baker (see Beveridge, ibid., 96), had at least some experience of intuition, 50 percent had only occasional assistance from it, and 17 percent, none at all. Thus one third of the scientists[9] might be classified by Jung as pure Intuitive Types, while the others not. This would suggest that intuiting, though common enough, is not synonimous with thinking, and a separate sub-category under rational behaviour is therefore justified.

---

[9] This percentage is higher than that registered in the survey carried out by this author, (see Appendix E, Table I, p. 258), which showed that for a general sample, 24 percent would be classified as Intuitives. Assuming statistical validity of the sample, this does not invalidate Platt and Baker's findings, but would seem simply to suggest that Intuitives are more numerous among scientists.

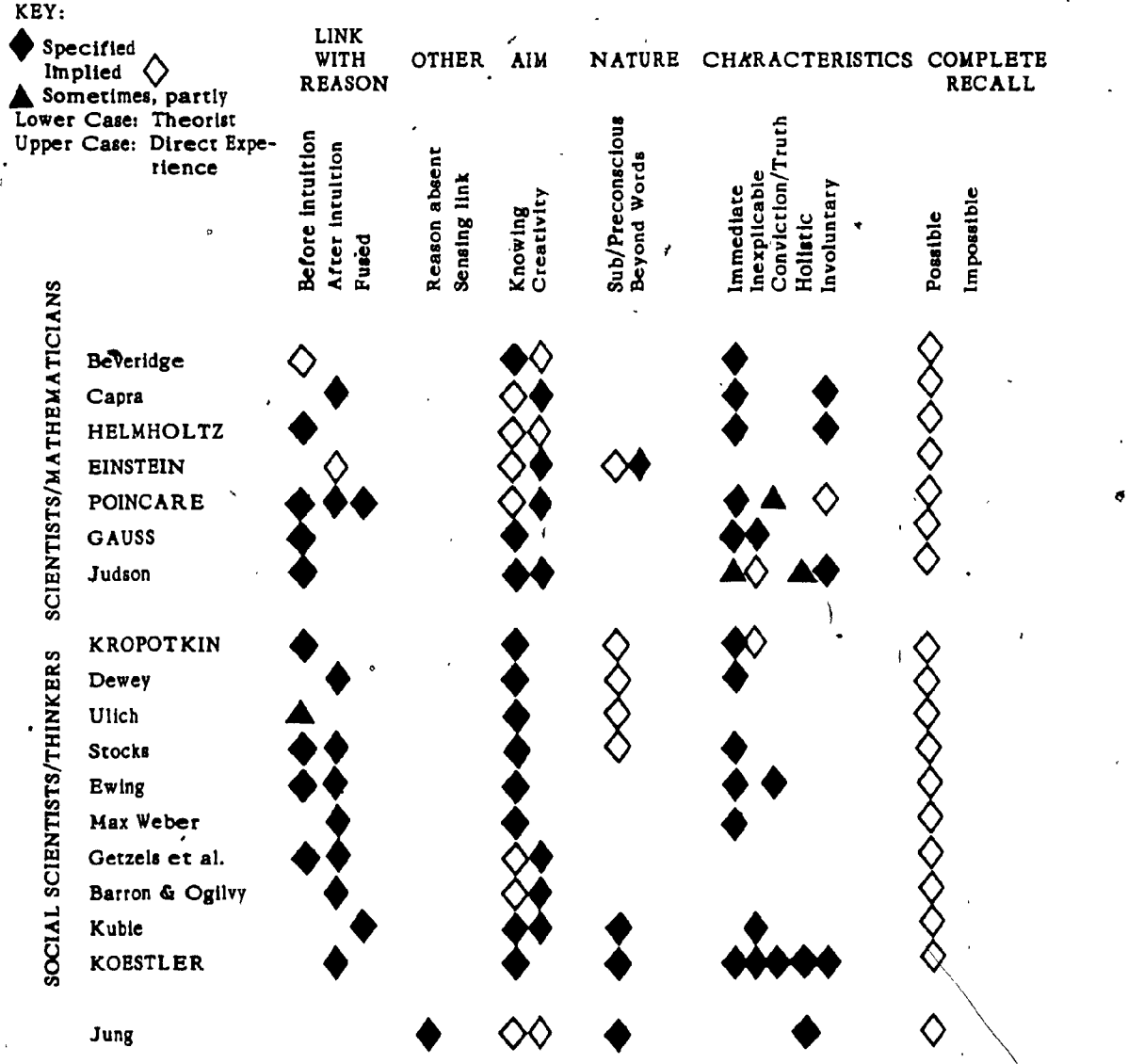
CHART 9: INTUITION AS UNDERSTOOD OR EXPERIENCED BY PHILOSOPHERS, COMPOSERS, POETS & WRITERS [10]



[10] See section III for quotations on which this summary chart is based

CHART 10: INTUITION AS UNDERSTOOD OR EXPERIENCED BY SCIENTISTS, MATHEMATICIANS, SOCIAL SCIENTISTS & THINKERS [11]

KEY:
◆ Specified
◇ Implied
▲ Sometimes, partly
Lower Case: Theorist
Upper Case: Direct Experience



[11] For quotations on which this summary chart is based, see Chart 8 for Jung, and Section III for others.

Section III : Some Reflections on the Nature of Intuition

Notes

The quotations included here are a representative rather than an exhaustive compilation, aimed to establish the very general association of the phenomenon of intuition with the rational process. Minority opinion, representing the experience of extremely introvert Intuitives (e.g. certain mystics, the Taoists, etc.) is beyond the scope of this study. Jung's descriptions are covered in Section I of this appendix, and are therefore not repeated here. References without quotation marks are either quotations or paraphrases of secondary sources. Quotation marks indicate the words of the person referred to are used directly. When the name is in capitals, this indicates the reference is to direct personal experience; when in lower case, the reference refers to the ideas or opinions of that person about the nature of intuition. In the latter case, it is usually not possible to ascertain the basis of this opinion, i.e. whether it stems from direct personal experience, or whether it is based on empirical observation, on reflection, on an intuited belief or a combination of these.

Intuition according to Philosophers

Plato: [A]n intuition . . . will follow suddenly after a long period of questions and answers: "when a flash of insight (phronesis) about everything blazes up, and the mind . . . is flooded with light". This truth itself is beyond words; names from which the thinking process starts are unreliable . . . the reasoned discourse of speech that seeks to explain, are "weak"; they offer no more than "a little guidance" to "kindle the light in the soul as from a leaping spark which, once generated, becomes self-sustaining".
(Arendt, 1978: 118)

Plotinus: "Dialectic . . . is the study of first principles which leads up to intuitive wisdom. It passes through logic and at last rises above it".
(quoted in Wild, 1938: 108)

---

1 The 22 primary sources cited here are in themselves adequate to sustain the argument developed here. Secondary sources are included here simply to supplement the findings. In this context, it was considered supererogatory to pursue them further, but they are retained because of their interest.

Spinoza: Some fairly elementary intuitions are possible in the absence of prior knowledge and without reason, but the more elaborate intuitions occur only after full exercise of reason.
(Westcott, 1968: 12)

Inspite . . . of . . . passages . . . where he [Spinoza] repudiates the aid of reason, he makes it abundantly clear that the discerning of new truth can hardly be expected except by the man who has used his reasoning powers to the full. Because of this connection, Spinoza tends to class Reason and Intuition together . . . . He is emphatic on this point.
(Wild, 1938: 26)

In the Tractatus Theologico-Politicus Spinoza seems to state quite absolutely that intuitive knowledge is either a priori or dependent on Reason as a foundation. "A man who can by pure intuition comprehend ideas which are neither contained in nor deducible from the foundations of natural knowledge, must necessarily possess a mind far superior to those of his fellow men, nor do I believe that any have been so endowed since Christ".
(ibid.,27).

Locke: "It is on . . . intuition that depends all the certainty and evidence of all our knowledge . . . . [I]n every step reason makes in demonstrative knowledge, there is an intuitive knowledge of that agreement or disagreement it seeks with the next intermediate idea, which it uses as a proof. . . .".
(Berlin, 1956: 88, 89)

Kant: "I do not know an object merely in that I think, but only insofar as I determine a given intuition, can I know an object".
(Arendt, ibid., 242n)

"All thinking is a means of reaching intuition".
(ibid., 118)

Knowledge is the product of sensibility and the understanding (i.e. sense perception). Sensibility is both receptive and active; intuition proceeds from it. Accordingly, intuition is either a priori (pure) as derived from experience, or a posteriori, i.e. produced from reason.
(Bentley, 1960: 75)

The young Kant, as a rationalist and a follower of Leibnitz, believed in the principle of Causality 'self-evidently', because reason "sees" such principles as an act of intellectual intuition.
(Aitken, 1956: 31)

"Intuitions without concepts are blind".
(Ayer, 1982: 157)

Bergson: Intuition is between intellect and instinct. It "partakes of both the immediate instinctual knowledge of life-in-action and the more analytical, impersonal apprehension of the intellectually patterned immobilities".
(Westcott, 1968: 8)

"Ultra-intellectual intuition" is the synthesis of several intuitions translated into intellectual terms, leading to "conception" which is "the result of intellectual operations performed by following the intuitions .... It is only through the sympathetic interaction with intelligence that intuition can be an enriching experience which can serve man individually and collectively in his search for truth".
(ibid., 10)

Dialectic is necessary to put intuition to the proof, necessary also in order that intuition should break itself up into concepts and so be propagated to other men .... [T]he philosopher is obliged to abandon intuition once he has received from it the impetus."
(Wild, ibid., 16)

Le Roy: "Tout le monde s'accorde à reconnaitre ... que la pensée comporte et pratique tour à tour deux types contraires de démarches .... Ces deux types de démarches ... nous les avons appelées respectivement Discours et Intuition. Elles sont pratiquement inséparables: il faut au moins une ébauche d'intuition pour mettre le discours en branle, comme à l'intuition, pour prendre corps et ne pas se dissoudre aussitôt en rêve, une ébauche au moins de discours".
(Le Roy, 1929: 142), (original emphasis).

J.S. MILL: "Suppose that all your objects in life were realised; that all the changes and institutions and opinions which you are looking forward to, could be completely affected at this instant: would

this be a great joy and happiness to you? And an irrepressible self-consciousness distinctly answered 'NO' ".
(Mill, J.S., 1875: 133, 4)

Croce: "Knowledge has two forms: it is either 'intuitive' knowledge or 'logical' knowledge . . . . " Intuition, imagination, representation, aesthetic, art, beauty, expression are synonimous terms. Logical knowledge is dependent on intuitive knowledge, and intuition supposes mental activity, a selective process among impressions ending in a synthesis and forming a unity "expressed" or made clear in the mind.
(Wild, ibid., 39; see also Westcott, ibid., 12-15)

"Intuition . . . [is valid] only in so far . . . [as it is] "reasoned or thought".
(Hughes, 1958: 226)

Croce distinguishes between two forms of intellectual activity: intuition and abstraction . . . . [For instance] the historian . . . is not only obliged to use his intuition . . . to identify the subject of his study . . . but he must also use his powers of abstraction . . . (to develop) a concept . . . which requires analysis of the kind usually associated with philosophy.
(White, 1956: 46, 47)

Whitehead: "Of course you must have intellect to manage the ideas that come through intuition . . . . "
(Price, 1954: 162)

(G)reat intuitive revelations . . . come . . . in exactly the same form as the results of our reasoning come to us. We call it reason when we emphasize the process of attaining . . . we call it intuition when our attention is centred on the actual first grasping of the idea.
(Wild, ibid., 93, 94), (original emphasis).

---

2 This quotation from Mill's Autobiography is inserted as an example of intuition in action. Although as a Utilitarian, Mill was not moved to explore the nature of this "irrepressible self consciousness" it seems evident that this crucial point in his intellectual development was what is generally understood as an intuition, springing unbidden, with characteristic immediacy and surprise, (in this case, shock), in the midst of cogitation.

Russell: "[A]ll our knowledge of truths depends upon our intuitive knowledge".

Bahm: "Intuition of fundamental truths lies at the root of all induction and deduction".
(Westcott, ibid., 19)

Arendt: Intuition is "the guiding metaphor for philosophical truth . . . [which] always presents us with a co-temporaneous manifold". This is in contrast to speech, which "discloses itself in a sequence of words or sentences. That the latter was a mere instrument for the former was axiomatic even for Plato and remained axiomatic throughout the history of philosophy".
(Arendt, 1978: 118)

Wild: "There is undoubtedly an intuitive method and immediate intuitive awareness on which reason and all other forms of knowledge are dependent."
(ibid., 227)

"Intuition is not alternative to reason: its minimum function is to form a basis for reason, and its wider functions (if any) to deal with what is inaccessible to reason."[3]
(ibid., 227)

"There is . . . no sure method of distinguishing between ideas acquired directly through intuition and those acquired through reason or perception working on an intuitive foundation."[3]
(ibid., 229)

" . . . Intuition is a subconscious, or preconscious working of the normal mind rather than a different type of working."[4]
(ibid., 231)

"Intuition follows rather than precedes rational thought and is the crown of reason. Such intuition rather than reason brings novelty into the world."[4]
(ibid., 232)

---

[3] These are among Wild's "Positive Conclusions" from her extensive examination and discussion of intuition.

[4] These are among Wild's "Possible Conclusions".

Intuition and Reason: Composers and Poets

MOZART: "When I am . . . completely myself, entirely alone, and of good cheer . . . my ideas flow best and most abundantly. Whence and how they come, I know not, nor can I force them. Those ideas that please me I retain in memory . . . . If I continue in this way, it soon occurs to me how I may turn this or that morsel to account . . . . All this fires my soul, and, provided I am not disturbed, my subject enlarges itself, becomes methodised and defined, and the whole, though it be long, stands almost complete and finished in my mind, so that I can survey it, like a fine picture or a beautiful statue, at a glance. Nor do I hear in my imagination the parts successively, but I hear them, as it were, all at once (gleich alles zusammen) . . . . What has been thus produced I do not easily forget . . . . When I proceed to write down my ideas, I take out of . . . my memory . . . what has been previously collected . . . . [T]he committing to paper is done quickly enough, for everything is . . . finished; and it rarely differs on paper from what it was in my imagination."
(in Ghiselin, 1960:44, 45), (original emphasis).

BEETHOVEN: "On my way to Vienna . . . sleep overtook me in my carriage . . . . While thus slumbering I dreamt that I had gone on a far journey . . . . Now during my dream-journey . . . (a musical) canon came into my head . . . . But scarcely did I wake when away flew the canon, and I could not recall any part of it. On returning here however, next day, in the same carriage . . . . I resumed my dream-journey, being on this occasion wide awake, when lo and behold in accordance with the laws of association of ideas . . . the same canon flashed across me; so being now awake I held it . . . fast . . . only permitting it to be changed into three parts . . . . ."
(in Ghiselin, *ibid.*,51)

Sessions: "[T]he composer . . . [is] living in a world of sounds, which in response to his creative impulse become animated . . . . The first stage in his work is . . . known by the . . . term 'inspiration'. The composer . . . 'has an idea' . . . consisting of . . . notes and rythms, which his musical thought proceeds. The inspiration may come in a flash, or . . . it may . . . develop gradually . . . [as] a clearly envisaged impulse toward a . . . goal . . . [which is] attained . . . [also as] a flash [this time] of recognition that this is exactly what he wanted."
(in Ghiselin, ibid.,47)

GOETHE: Based on the experience of writing Werther, the following stages of creation were enumerated: [5]

(i) Prolonged contemplation of the subject
(ii) Resulting masses of ideas and feelings with no cohering principle
(iii) A sudden, actual, intimate and moving example
(iv) The harmonious self-arrangement of the isolated facts into a whole
(v) The feeling of being an instrument rather than an agent when contemplating the final work
(vi) The discovery that in spite of the inspirational nature of its creation the harmonious whole might be made yet more harmonious
(vii) The polishing of the work of art.

(Wild, ibid., 163)

COLERIDGE: "... In consequence of a slight indisposition, an anodyne had been prescribed, from the effects of which he [6] fell asleep in his chair .... The author continued for about three hours in profound sleep, at least of the external senses, during which time he has the most vivid confidence, that he could not have composed less than from two to three hundred lines; if that indeed can be called composition in which all the images rose up before him as things, with a parallel production of the correspondent expressions, without any sensation or consciousness of effort. On awaking he appeared to himself to have a distinct recollection of the whole, and ... instantly and eagerly wrote down the lines (of the poem Kubla Khan) that are ... preserved. At this moment he was unfortunately called out by a person on business from Porlock, and detained by him above an hour, and on his return to his room, found to his no small surprise and mortification, that ... with the exception of some eight or ten scattered lines and images, all the rest had passed away ...."
(Ghiselin, ibid.,85), (original emphasis).

---

[5] Wild comments (ibid., 164) that "(a)ll these stages ... have their counterparts in the religious vision, in intuition of God, or God's will, as described by the mystics; by moral intuitants .... And surely too there is a general resemblance to the intellectual inspiration or intuition ...."

[6] Coleridge refers to himself throughout in the third person.

HOUSMAN; "Having drunk a pint of beer at luncheon---beer is a sedative to the brain, and my afternoons are the least intellectual portion of my life---I would go out for a walk of two or three hours. As I went along, thinking of nothing in particular . . . there would be a flow in my mind, with sudden and unaccountable emotion, sometimes a line or two of verse, sometimes a whole stanza at once, accompanied, not preceded, by a vague notion of the poem which they would be destined to form a part of. Then there would be a lull of an hour or so, then perhaps the spring would bubble up . . . . When I got home I wrote them down, leaving gaps, and hoping that further inspiration might be forthcoming another day. Sometimes it was . . . but sometimes the poem had to be taken in hand and completed by the brain, which was apt to be a matter of trouble and anxiety, involving trial and disappointment, and sometimes ending in failure".
(in Ghiselin, ibid.,91)

KIPLING: "Let us now consider the Personal Daemon of Aristotle and others . . . . Most men . . . keep him under an alias which varies with their literary or scientific attainments. Mine came to me early when I sat bewildered among other notions and said, 'Take this and no other'. I obeyed, and was rewarded . . . . After that I learned to lean on him and recognize the sign of his approach . . . . Note here. When your Daemon is in charge, do not try to think consciously. Drift, wait, obey . . . . [Verify] one's references, which is a matter in which one can help one's Daemon . . . . Take nothing for granted if you can check it. Eventhough that seem waste-work and has nothing to do with the essentials of things, it encourages the Daemon . . . . "
(Ghiselin, ibid.,157,158), (original emphasis).

AMY LOWELL: "[A] scientific definition of a poet might . . . [be]: a man of an extraordinarily sensitive and active subconscious personality, fed by, and feeding, a non-resistant consciousness. A common phrase among poets is, 'It came to me' . . . really . . . the best description I know of the conscious arrival of a poem. Sometimes the external stimulus . . . can be traced . . . . Sometimes the consciousness has no record . . . . But whatever it is . . . only emotion can rouse the subconscious into action . . . . The subconscious is, however, a most temperamental ally. Often he will strike work at some critical point

---

[7] Jung refers to "The Daemon of Socrates" (Jung, 1976: 145) --- one of the "others"?

and not another word is to be got out of him. Here is where the conscious training of the poet comes in, for he must fill in what the subconscious has left . . . ."
(Ghiselin, ibid.,110,111)

SPENDER: "Inspiration is the beginning of a poem and it is also its final goal. It is the first idea which drops into the poet's mind and it is the final idea which he at last achieves in words. In between this start and this winning post there is the hard race, the sweat and the toil."

"Paul Valery speaks of the 'une ligne donnée' of a poem. One line is given to the poet by God or by nature, the rest he has to discover for himself . . . ."

"Now the line . . . is a way of thinking imaginatively . . . . [T]he line embodies . . . ideas . . . . [T]hese ideas must be further made clear in other lines. That is the terrifying challenge of poetry. Can I think out the logic of images?"
(Ghiselin, ibid.,118, 119)

C. Day Lewis: "During . . . [my] creative phases . . . I feel an intermittent but confident exhilaration. This mood . . . will often throw up a line of poetry, which seems to come out of the blue. I brood upon this line, trying to discover in what direction it is pointing . . . . I use it as bait. That is to say, I drop it back into the unconscious and in a state of 'wise passivity' wait for what it may catch. Other phrases, images, ideas and associations attach themselves to the bait, and I carefully reel them in. Thus, gradually, the potential subject matter of the poem is accumulated. But much of it will be discarded . . . ."

. . . . . .

"[I]n . . . the 'fishing' phase, the intellect is relatively inactive; one accepts in a trancelike state, everything that comes up. But there follows a phase of the most arduous intellectual activity, when the gathered material has to be criticized in the light of the growing poem and of whatever inkling I have about its theme."
(Lewis, C. Day, 1961:172-177)

Wild: The poets . . . have given their testimony that the beautiful thing is realized by them either before, or in the act of, or even without subsequent creation, not through the workings of the reasoning faculties, not in virtue of its substantial nature, nor by a

perception of its moral or religious significance, but inexplicably and immediately, by a mysterious yet absolute act of knowledge which may well be described as intuition.
(Wild, ibid.,135)

V. WOOLF: Tuesday, 20 Jan., 1931: "I have this moment, while having my bath, conceived an entire new book . . . . Lord how exciting. This sprang out of my paper to be read on Wednesday . . . ."
(Bell, 1982:6)

Monday, 26 Jan., 1931: "Heaven be praised, I can truthfully say on this first day of being 49 that I . . . have returned to Waves; & have this instant seen the entire book whole, & how I can finish it---say in under 3 weeks".
(Bell, 1982:7) [8]

Intuition according to Scientists and Mathematicians

Beveridge: "Occasionally . . . there flashes into the mind some strikingly original idea . . . . We may suddenly perceive for the first time the connection between several things or ideas, or may take a great leap forward where the connections . . . are obvious . . . . It will be convenient to consider . . . [these ideas as] 'intuitions'".
(Beveridge, 1950:91)

"Most but not all scientists (83%) are familiar with the phenomenon of intuition".
(ibid., 96)

Capra: "The rational part of research would . . . be useless if it were not complemented by the intuition that gives scientists new insights and makes them creative. These insights tend to come suddenly and, characteristically, not when sitting at a desk working out the equations, but when relaxing . . . . Intuitive insights, however, are of no use to physics unless they can be formulated in a consistent mathematical framework, supplemented by an interpretation in plain language".
(Capra, 1980: 32)

---

[8] Two bright spots in an otherwise surprisingly dull and prosaic diary.

HELMHOLTZ: [D]escribes his scientific investigations as proceeding through three stages: saturation consisting of initial investigations carried on until he could make no further progress with the problem; incubation, a period of rest and recovery during which, without conscious awareness of it, the materials in his mind were moved about and reorganized; and illumination, the appearance of a sudden and unexpected solution, which is what we commonly refer to as a flash of intuition.
(Hunt, quoted by Stern, 1982), (original emphases).

EINSTEIN: "The words or the language, as they are written or spoken, do not seem to play any role in my mechanism of thought. The physical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be 'voluntarily' reproduced and combined .... The above-mentioned elements are, in my case, of visual and some of muscular type. Conventional words or signs have to be sought for laboriously only in a secondary stage."
(Ghiselin, ibid., 43)

"There is no logical path to these [universal] laws; only intuition, resting on sympathetic understanding of experience, can reach them . . . ."
(Pirsig, 1974:106,107).

POINCARÉ: "C'est par la logique qu'on démontre, c'est par l'intuition qu'on invente . . . ." [L]'éclair intuitif, qui seul permet à l'esprit de percevoir les mouvements d'ensemble, de penser avant mise en concepts clos, et ainsi de conquérir des vérités nouvelles. De là d'étroits liens entre les deux problèmes de l'invention et de l'intuition. Ce sont en somme les deux faces, psychologique et critiques, d'un seul problème."
(Le Roy, ibid.,143)

"Most striking . . . is this appearance of sudden illumination . . . . [O]f a certainty it is only fruitful if it is on the one hand preceded and on the other hand followed by a period of conscious work, these sudden inspirations . . . never happen except after some days of voluntary effort which has appeared absolutely fruitless . . . . [T]he second period of conscious work . . . is necessary to put in shape the results of this inspiration . . . but above all . . . [to assure its] verification . . . . "
(Ghiselin, ibid.,38)

GAUSS: Wrote concerning a mathematical problem he had tried unsuccessfully to prove for years, "finally two days ago I

succeeded . . . like a sudden flash of lightning the riddle happened to be solved. I cannot myself say what was the conducting thread which connected what I previously knew with what made my success possible."
(ibid.,94, 95)

Judson: One path to enlightenment . . . has been reported so widely, by writers and artists, by scientists, and especially by mathematicians, that it has become established as a discipline for courting inspiration. The first stage is prolonged contemplation of the problem, days of saturation in the data, weeks of incessant struggle---the torment of the unknown. The aim is to get in motion the unconscious processes of the mind, to prepare the intuitive leap . . . . Sometimes out of that saturation the answer arises, spontaneous and entire, as though of its own volition . . . . More usually . . . in the classic strategy for achieving enlightenment the weeks of saturation must be followed by a second stage that begins when the problem is deliberately set aside . . . . After several days of silence, the solution wells up.
(Judson, 1980: 6, 7)

Intuition according to Social Thinkers (Theoreticians, Social Scientists, etc.)

KROPOTKIN: "Then followed months of intense thought in order to find out what the bewildering class of scattered observations meant until one day all of a sudden the whole became as clear and comprehensible as if it were illuminated with a flash of light . . . ."
(Beveridge, 1950: 92, 92)

Dewey: First comes awareness of some difficulty or problem which provides the stimulus. This is followed by a suggested solution springing into the conscious mind. Only then does reason come into play to examine or reject or accept the idea. If the idea is rejected, our mind reverts to the previous stage and the process is repeated. The important thing to realise is that the conjuring up of the idea is not a deliberate, voluntary act.
(ibid., 72, 73)

Ulich: "[T]hough intuition is not the mere extension, it is by no means the negation of critical intelligence and of the laws of logic . . . . [I]ntuition, though appearing like a 'gift' and beyond the reach of

mere effort, is nevertheless the result of preparation, which may be intellectual in character or of other forms of self-discipline . . . . Paradoxically, though it may seem to speak of 'trained' intuition, it is the only form which deserves its name. All other claims are on behalf of quackery."
(Winkler, 1960: 86), (original emphasis).

Stocks: There must be some truths which are not deduced nor deducible (i.e. intuited) on which reason is critically dependent---but also vice-versa: Reason can bring an individual to the point of making intuitive judgements. Intuition of self-evident truths is direct and immediate---apprehended by the mind as an object by the sense organs.
(Westcott, 1968: 17)

Ewing: Intuition is "the immediate knowing of truth, without proof or the possibility of proof", apprehended immediately and with conviction. All reason rests on intuition. "Reason can deduce from premises, but cannot completely justify deduction. Primitive premises and the act of deducing must be seen as true, deductively."
(ibid.)

"Intuition presupposes at least a partial analysis of the situation or a selecting of certain aspects of it . . . . What we see immediately may be the result of a careful survey or long experience of the whole situation or the whole system involved, and yet may be incapable of deduction from definite explicit features in that situation or system."
(ibid., 18)

Max Weber: Our immediate intuitions of meaning may be real and, as such, correct. But their interpretation cannot dispense with a rationally consistent system of theoretical concepts.
(Parsons in Hughes, 1958: 311)

Getzels, Jackson & Hudson: The process of creative thinking is . . . conceived as involving two sequential stages of processing information, divergent thinking followed by convergent thinking. The sequence may be repeated several times before a creative solution is achieved . . . . Divergence is the making in the mind of many from one. Convergence is the making of one from many. Mind

is conceived as constantly branching out . . . before narrowing to a point of decision . . . and so on in cyclical pattern. Creativity involves the entire cycle . . . . At the mid-point between divergence and convergence they [creative persons] intuit that the necessary ingredients of a new synthesis are now present.
(Hampden-Turner, 1981:104)

Barron and Ogilvy: The creative individual flirts with doubt and disorder, enduring anxiety while intuiting the answer to his doubts. He then closes on an embryo solution and reorders the strongest and most certain structure that rational mind can apprehend.[9]
(ibid.,112)

Kubie: It may be that the two (intuition and reasoning) are no more than different aspects of the same sort of psychological functioning and that what we call intuition is simply a combination of rational and affective processes too minute to be identified. While reasoning is wholly conscious, intuition is only partially so. Yet intuition is not an "unconscious" process in the Freudian sense: it goes on in the area that Freud called the "preconscious". It is characterized by a "fusion of intermediate steps" that resists precise identification. Of its importance "for all normal symbolic creative thinking, whether artistic or scientific" there is little doubt. It alone "makes possible those . . . leaps in art and science by means of which the creative process sometimes dons seven-league boots."
(Hughes, ibid., 30)

KOESTLER: "One day (when I was fourteen), I was lying on my back under . . . the unbroken, unending, transparent, complacent, saturated blue above me, and I felt a mystic elation---one of those states of spontaneous illumination which are so frequent in childhood and become rarer and rarer as the years wear on.[10] In the middle of this beatitude, the paradox of spatial infinity suddenly pierced my brain as if it had been stung by a wasp . . . . [A] finite quantity like the earth---or like myself reclining on it---shrank to zero when divided by an infinite quantity . . . . It made no sense . . . and the answer to the riddle was obviously to be found by reading more books . . . ."
(Koestler, 1954: 35)

---

[9] Whitehead developed a similar concept in Process and Reality (see Wild, ibid., 85)

[10] A point also made by Winkler (1960: 1).

Wild's Thirty-One Definitions of Intuition (Paraphrased)

Source: Wild, K.W. (1938), Intuition, Cambridge, The University Press, pp. 211-220.

Intuition is:

1. Sensation as distinct from perception
2. Prior to or synchronous with sensation
3. Perception as distinct from sensation
4. Holistic
5. Feeling or emotion (non-intellectual)
6. Subjective experience, vaguer than perception
7. Instinct to act
8. The basis of mental activity
9. The realization of self-evident truths
10. The apprehension of true reality
11. A gift of specially endowed individuals
12. Telepathy
13. The generic term for all ways of understanding
14. Unreasoned future-consciousness
15. Ineradicable pragmatic belief
16. Assumption to allow mental activity
17. The unreasoned apprehension of the future importance of a present event
18. The unreasoned mental guide to betterment
19. Life as abstracted from living creatures

20. The faculty by which we recognize ultimate truths
21. An appetite for new experience
22. Imagination
23. Apprehension of future truths
24. The faculty of knowing the unknowable
25. The mental faculty that puts us in touch with what is outside the cosmos
26. God immanent
27. Subconscious action
28. Empathetic sensitivity and understanding
29. Introspective understanding of self
30. The principle of teleology
31. A non-existent mental function

Wild's grouping according to "the essential differences in meaning"

1, 8, 13 Normal mental functioning

10, 12, 14, 30 Abnormal ways of knowing

14, 15, 17, 18, 19, 21, 23, 27, 30 Teleological

7, 20, 21, 24, 25, 29 Transcendental

Not categorized: 2, 3, 4, 4, 5, 9, 11, 16, 22, 26, 28, 31 (one third)

Section IV: Critique of the Jungian Conception of Feeling as a Rational Process

In the charts and the quotations in the previous sections, the venerable history of interest in or experience of the nature of intuition was outlined. That there is no comparable history of feeling is not surprising when it is realized that the word, as representing a "separate faculty of the psyche" did not enter the English and German (and presumably other European) languages until the late eighteenth century, (Hillman, ibid., 78, 79). Surprisingly, despite the Romantics' lively interest in the subject since that time, no comparable anecdotal literature of personally experienced feeling developed as a counterpart to that of the intuitives, just cited. On the one hand, the intuitive's ability to articulate the nature of the intuitive experience is in itself empirical evidence in favour of the rational nature of intuition. People who experience the phenomenon, i.e. intuitives, are themselves rational. Whether scientist, mathematician or artist, they are able to talk about, and to witness its link with reason. No such outpouring of positive testimony is forthcoming when we turn our attention to feeling. Feelers have great difficulty in expressing themselves in a rational fashion: "Nothing disturbs feeling so much as thinking", as Jung himself says, (ibid.,357). Yet he maintains they are rational. How can this be?

This question must have been put innumerable times to Jung, for we see him on the rostrum at a conference in 1931 being rather defensive---and evasive:

> What I call the thinking and feeling types comprise two groups of persons who . . . have something in common - which I cannot designate except by the word rationality. No one will dispute that thinking is essentially rational, but when we come to feeling, weighty objections may be raised which I would not like

> to brush aside. On the contrary, I freely admit that this problem of feeling has been one that has caused me much brain-racking. **However, as I do not want to overload my lecture with the various existing definitions of the concept, I shall confine myself to my own view.**
> (Jung, ibid.,538); (original emphasis underlined; this author's emphasis in bold face).

Would that Jung had confronted these other views instead of dismissing them as overload; but instead, he goes on to a lengthy explanation of how he differentiates feeling from sensation and intuition, (a matter that presents no difficulty here) ending with this statement:

> I take feeling as a function per se and distinguish it from sensation and intuition. Whoever confuses these last two functions with feeling in the strict sense is obviously not in a position to acknowledge the rationality of feeling, it becomes quite clear that feeling values and feeling judgements---indeed feelings in general---are not only rational but can also be as logical, consistent and discriminating as thinking.
> (ibid.,539)

At least it is clear from this passage that Jung is not, as might be implied from his association of "irrational" intuition with women, a surreptitious male chauvinist, for he associates feeling as strongly with women as with intuition[1]. What is not clear is his persistent assertion of the rationality of feeling. Sensing, no doubt, that some in his audience like myself, remain unconvinced, he delivers a very clever, but underhand blow---if you are a thinker, he seems to say, your opinion is automatically disqualified, because you are inherently incapable of understanding the true nature of feeling:

> This [the rational nature of feeling] may seem strange to the thinking type, but it is easily explained when we realize that in a person with a differentiated thinking function the feeling function is always less developed, more primitive, and therefore contaminated with other functions, these being precisely the

---

[1] In this he is not alone, see for example Chadrow in Gilligan, 1982:8.

> functions which are not rational, not logical, and not discriminating or evaluating, namely, sensation and intuition. (ibid.).

The death blow to criticism has been delivered. Rational thinking about feeling is the thinker's Achilles' heel. Spoken by an authority from the rostrum, it must have seemed irrefutable to those at the conference. "Quod erat demonstrandum." Careful analysis after the fact, however, proves the argument extremely weak. In essence, Jung says that thinkers are not able to think straight about feeling because their feeling function is undeveloped, and therefore "contaminated" by the "irrational" and illogical functions, (sensation and intuition); hence the evidence of thinkers is to be disregarded. Should we believe him?

First one must question whether thinking and feeling are so unreconcilable. As Kaufmann puts it:

> Some people think that depth of feeling or emotion rules out thought, and that anyone who thinks a great deal is likely or even bound to lack profound feelings. Yet many of the greatest poems and the most magnificent speeches in Shakespeare's plays move us by communicating emotions that are not simply labelled; they voice the thoughts that constitute most of the emotions.
> (Kaufmann, 1980:454)

But Kaufmann's skepticism on this point will have to be discounted, since one cannot easily accept his inference that Shakespeare can be classified in the Jungian sense of the word, as a Thinker.

So let us accept the opposing nature of thinking and feeling. In so doing, does not this disqualify thinkers thinking about feeling? But if they cannot, who can? According to Jung, mere contamination by sensation and intuition is enough to disallow the thinker's thoughts on the matter, because he considers both these functions irrational. But what if intuition is rational---that intuitives

are by their highly developed gifts, able to get beyond the normal, pedantic, pedestrian thoughts of the down-to-earth Thinker? If the argument in the previous sections of this paper can be accepted as evidence of this, and I think it can, then the Thinker's inability to grasp the meaning of feeling becomes acceptable, but not for the reason given by Jung. And Kaufmann's argument comes better into focus, for would it not be reasonable to believe that Shakespeare, in company with those highly creative individuals quoted in Sections II and III, was highly intuitive? Is this not the reason why he and they are capable of synthesizing thought and feeling - something neither Thinkers (because they are too distant from feeling) nor Feelers (because they are enveloped by feeling) can articulate?

Perhaps we can now see why this problem of feeling has been one that has caused Jung "much brain-racking". It is not the Thinker's Achilles' heel, it is Jung's. It seems that, great man that he is, he has fallen into the trap of what de Bono calls "vertical thinking", (see p. 187). Rather than risk "lateral thinking", and the restructuring of his concept this entails, he makes of his original formulation an ideology, a dogma, pushing aside all doubts about its perfection. No one at the 1931 conference would want to be associated with the "crass" Thinker, so all would agree that feeling was indeed a rational process.

The first nine chapters of Psychological Types proves Jung erudite, for "(e)rudition is extensive knowledge acquired chiefly from books", (Kaufmann, 1980:353). In his dogmatic defense of his interpretation of feeling (and intuition), Jung shows himself a poor scholar, for "(s)cholarship . . . consists in the scrupulous consideration of objections and alternatives", (ibid.).

What can we learn from those other definitions of feeling that Jung avoided mentioning, "for fear of overloading his lecture"? Beyond the dictionary definition, quoted earlier, which places feeling as a subjective reaction that "usually connotes an absence of reasoning", there are more technical affirmations. Pears, (1966: 144) proposes the thesis that statements of feeling "possess the following peculiarity: The person himself does not come to make them by considering evidence; he does not use observation and inference; for him, at least, they are not hypotheses but immediate. This is obviously a very plausible thesis, and some version of it is almost certainly true of typical utterances of statements . . . [of feeling]."

Jung and Jungians fight a rearguard battle against this kind of understanding, for instance Hillman, (quoting Pascal): "The developed feeling function is the reason of the heart which the reason of the mind does not quite understand", (ibid.,91). This is, of course, pure sophistry. "Reason of the heart" may be beautiful, insightful and in certain situations, far superior to "the reason of the mind", but the mind alone is the seat of reason; "reason of the heart" is a metaphor for perception. And again: "feeling like thinking is a rational function, since, as is shown by experience, values in general are bestowed according to the laws of reason" (ibid., 90). Accepting the Jungian contention, that feeling is valuing, what experience (or whose) shows their accord with reason?

An early mentor, L. Susan Stebbing, wrote a book, Thinking to Some Purpose, dealing with ways to recognize --- and avoid the very pervasive---and human problem of judging based on emotional appeal (feeling), instead of reasoning. Hillman's bald statement, that feeling is rational, along with similar

ones made by Franz, (ibid.,1), and Jung himself, (Jung, 1976: 359, 435, 538), bear scrutiny, following Stebbing's precepts. Unfortunately one must conclude they are, in her lexicon, examples of propaganda, in the sense that they seek "to bring about the acceptance of a conclusion by methods other than that of offering grounds for rational conviction", (Stebbing, 1948:80).

The method used in these statements, is similar to that used by many propagandists: repetition, and the weight of doubtful authority. Repeated affirmation of statements, (such as "feelings are rational"), have "the power . . . to affect behaviour and inculcate beliefs". This is a "curious characteristic of human beings . . . only if we forget that human beings are not for the most part rational", (ibid., 83). Over the years, the statement that feelings are rational, has been reiterated incessantly, but repetition does not make it true.

As to the second method, of applying the weight of doubtful authority, no one would question the eminence of the authority of Jung and his disciples in their own field, nor seek to suggest that they had not made a worthy contribution to knowledge; but that field of knowledge is not logic, and the logic of the repeated statement, on the evidence before us, is in error.

Section V : Conclusion

This critique, regarding the need to reverse the rational/irrational (i.e. supra rational) valence between intuition and feeling, is meant to enhance, not to destroy the concept of Psychological Types. There is no reason to suggest that since Jung was in error in this regard, his whole concept falls. Although he may have unconsciously feared this, and for this reason held so tenaciously to his original concept, it is obviously not in danger. Murray's assessment, quoted earlier in Section I, stands and bears re-quoting: "Considered in toto, Jung's descriptions of type differences are most insightful . . . and more suggestive theoretically than anything (else) that is found in the literature of personology", (in Kaufmann, ibid.,308). With his knowledge of the archetypal heroes, each with their "dark night of the soul", Jung should have been willing to "risk coming apart to be reintegrated, lose his life to save it", (see Hampton-Turner, ibid.,28).

He should have shown more confidence in his central motif, and allowed---even encouraged its refutation. As Popper has said, "A theory which is not refutable by any conceivable event is non-scientific. Irrefutability is not a virtue of a theory (as people often think) but a vice", (Popper, 1969:36). In any event, "psychoanalysis is not a theory that formulates general laws . . . and then makes precise predictions. It is more like history, archeology, and evolutionary biology: an attempt to reconstruct the past and tell the most likely story about what happened", (Kaufmann, ibid.,96). To quote his great rival, Freud, "Mediocre spirits demand of science a kind of certainty which it cannot give, a sort of religious satisfaction. Only the real, rare, true scientific minds can endure doubt, which is attached to all our knowledge . . . . Mental events seem to be

immeasurable and probably always will be so", (in ibid.,100).[1]

Kant provides a most useful insight, when he reflects (on Plato):

> it is by no means unusual, upon comparing the thoughts which an author has expressed in regard to his subject . . . to find that we understand him better than he understood himself. As he has not sufficiently determined his concept, he has sometimes spoken, or even thought, in opposition to his intention.
> (quoted by Arendt, ibid.,63)

And no wonder, for creative, innovative people (Jung amongst them) are highly intuitive, and the intuitive "needs to look at things from afar or vaguely in order to function, so as to get a certain hunch from the unconscious, to half shut the eyes and not to look at facts too closely. If one looks at things too precisely, the focus is on facts, and then the hunch cannot come through", (Franz, ibid., 31). Moreover, "The intuitive type sows but never reaps", (ibid.).

If Jung himself did not altogether understand this, (objectivity is always difficult when applied to the self), there is ample proof his followers did. Von Franz, who may be taken as exemplary, was to say in her lecture at the C.G. Jung Institute, Zurich in 1961:

> I think the theory of the four functions has a kind of practical value, but it is not a dogma. Jung, in his books, very clearly puts it forward in this way, as a heuristical stand-point---a hypothesis by which you can find out things.[2] We know now that in all scientific investigations we cannot do more than put forward thinking models, make models and see how far the facts fit, and if the facts do not coincide we have to correct the model . . . .
> (Franz, ibid., 51)

---

1 Of course Freud himself could not endure the doubts raised by Adler and Jung, hence their parting company.

2 This very well may be Jung's general credo, though, as we have noted throughout this appendix, it does not appear to apply to the subject under investigation here.

I would like to believe that von Franz and her fellow Jungians would be willing to agree, on the basis of this critique, that in this regard, the facts indeed do not coincide with the model, and the model must be corrected.

Essentially, the model remains intact, however, for the needed change is minimal. Thinking and feeling remain opposite tensions in the human psyche, as do sensation and intuition, (Diag. 4, p.43). But intuition would be recognized, as it has empirically been shown to be, the valued ally of thinking in the rational process. Gone would be the intellectual gymnastics associated with making of feeling, against all common sense and understanding, an evaluating, rational function. Instead, it would take its natural place as a perceptive function, which, along with sensing, would be accepted as the foundations of rational thought and synthesis. Feeling would cease to be the prerogative of the early twentieth century conventional Swiss hausfrau model Jung had made of it, and be expanded to include all women and men whose central motivation is feeling. In its highest form feeling is love---love of others, of the earth, of God. It is strange that Jung makes no mention of love as a critically important human attribute; one which we must all cultivate, but which is the central psychic motivating force for some of the world's most remarkable and inspiring people[3]. In his misguided pre-occupation with Feelers as conventional women, whom he somehow sees as rationally evaluating, Jung seems to have missed the crucial point entirely.

---

[3] One thinks immediately of the apotheosis of feeling we see in an Albert Schweitzer and a Mother Teresa, but anyone whose feeling of love for his fellow men, the earth, or God is so strong that it motivates their lives should dignify the title of Feeler.

Love is supra-rational, (what Jung means when he or his translator wrongly uses the term "irrational"). Rational it is not, but neither is it irrational. "On the contrary", as Fromm (1970: 27) tells us, "the experience of love, of man . . . of God . . . is as Albert Schweitzer has pointed out, the consequence of rationalism, its most daring and radical consequence." The point bears elaboration:

> It is based on our knowledge of the fundamental, not the accidental, limitations of our knowledge. It is the knowledge that we shall never 'grasp' the secret of man and of the universe, but that we can know, nevertheless, in the act of love. (ibid.)

. . . and Fromm's last word on the subject:

> To have faith in the possibility of love as a social and not only exceptional individual phenomenon, is a rational faith based on the insight into the very nature of man. (ibid.,112)

It is faith, however, that is perhaps available, but not shared equally by all. And although the faith in love is rational, and the consequence of rational thought about it, love---feeling in its highest form,---cannot be "grasped" by the rational mind: it is a supra-rational phenomenon.

The world has had, and needs more than ever, its great lovers, in Fromm's profound sense of the work. Surely there is a place for them among the Psychological Types, and that place must be with Feelers.

This adjustment to the concept is no revolution; rather it is the concept's natural evolution. The move in this direction is already well underway. We have already quoted Hillman quoting Pascal: "The developed feeling function is the reason of the heart",(Franz and Hillman, ibid.,91). Even if he used the phrase inappropriately, to suggest this kind of "reason" is rational rather than supra-rational, it is in the lexicon. Moreover, he is entirely to the point when he later says:

> The (sympathetic) application of law . . . is an operation of feeling . . . . The Bill of Rights is a document of the feeling function at its abstract best.
> (ibid.,98)

But it is to the younger Jungians, less awe-inspired by the great master, more capable to independently "get a certain hunch from the unconscious, to half shut their eyes" and not look too closely at what, willy nilly, may have become dogma.

Among these, I am happy to have had as an advisor Roger Woolger, when he was Visiting Scholar at Lonergan College, Concordia University during the academic year, 1980-81. Diagram 5, (page 44), was made by him for a conference of psychologists. It is a matter of considerable satisfaction, that granted the special nature of this presentation, there is virtually no conflict with my own appreciation of the concept, (see Diag. 6, p.45).

---

[4] Other, deleted parts of this quotation, involving evaluation and judgement, are I believe, more appropriate to the Thinker, see Chart 8, p.204.

APPENDIX C: APPENDIX B VALIDATED

Excerpts from a letter from Roger Woolger, M.A., Dipl.Analyt.Psych., Jungian Analyst, to the Writer, dated 13 September, 1983

Dear John,

. . . . . .

I am really most impressed with your paper[1] and gained a lot from reading it. I realise I have been steering around the rational/irrational dogma for years, trying . . . to teach it in a very half-hearted way because I didn't really believe it. Even if Jung did intend it as a heuristic device, (von Franz), most of his disciples use it, uncritically, as an article of faith . . . . Back when we discussed it, I kept my own reservations quiet to see what you would do with the conundrum, and you have done magnificently, without, I hope, any leading from me.

. . . . . .

It is indeed remarkable how few Jungians ever challenge or extend Jung's ideas . . . . . Partly this is due to his rather imposing personality . . . . Absolutely no-one in his circle had the learning to stand up to him---apparently he was quite defensive when peers from other schools disagreed with him.

. . . . . .

Warmly,
(signed) Roger Woolger

P.S. Your remarks about <u>love</u> very important . . . . My old analyst who analyzed w/[with?] Jung in the 30s and 40s said Jung was, sadly, a little lacking in love.

---

[1] Appendix B comprises the major part of the paper to which Roger Woolger is referring in this letter.

APPENDIX D : THUMBNAIL SKETCHES OF PLANNER TYPES[1]

Reformers

Planning Anarchists, "in the light of the crisis in mass technocratic society [and] . . . in the [sic] absence of a creative alternative, reject planning [as we know it] altogether", (Grabow, Heskin, 1973:106). They follow to the letter, the creed that "without authentic participation of the members of a community, on equal footing, no effective planning . . . can evolve", (Etzioni, 1973:107; original emphases). The Belgian "Anarchitectes" are a good example.

Activist Planners believe their empathy with those ill-served by our society leads them to truly understand their needs, and being trained and articulate, legitimizes their leading and speaking for them. Activists, deeply suspicious of conventional planning, consider participation procedures a sham, calculated to manipulate those who oppose established interests into submission. "Guerilla Architecture", is the only answer, (Goodman, 1971:197).

Advocate Planners are concerned to correct mal-distribution of power, by reaching within the Establishment, (Davidoff and Davidoff, 1974:39). They believe the piecemeal approach of Activists "will not necessarily of itself

---

[1] Originally Appendix A of Jung and Healthy ? An Exploration of the relationship between Jung's "Compass of the Psyche" and the Planning Profession, presented by this writer at the Annual Conference of the American Planning Association, Minneapolis, Minn., on 8 May, 1984.

allocate its energies in accordance with abstract criteria of need and equity", (Wolfenden Committee, 1978). They "reject both the notion of a single 'best' solution and . . . of a general welfare . . . . Planning [for them is] . . . pluralistic and partisan [thus] . . . overtly political", (Peattie, 1968:81). Therefore, planning should be "a practice which openly invites political and social values to be examined and debated", (Davidoff, 1965:331).

Visionary Planners are, like their fellow Reformers, highly dissatisfied with the status quo, but unlike them, are future-oriented. They believe that valid plans can "hardly be conceived if the mind does not have a stored-up vision of what the possible can offer under optimum conditions", (Soleri, 1969:7). They verbally or graphically describe the Apocalypse toward which society is heading, and the Millenium they conceive as Man's destiny, (Reissmann, 1964). They are usually content to deal with what the future should be, leaving to others to state how this is to be achieved. Typical visionaries: Le Corbusier, (Blake, 1960), CIAM, (Moholy-Nagy, 1969), Paul & Percival Goodman, (1947), Soleri, (ibid.), Frank Lloyd Wright, (1963).

Systemizers

Observer Planners were initially explorers/discoverers of new fields of study. They are usually one-to-one with the object under investigation, developing their own, first-hand data and maps. Typical observers: Geddes, (1968), Gans, (1967).

Empirical Planners place faith in the inductive approach, working from the particular to the general law. They may begin with a speculative hypothesis, but are primarily interested in what truths the data may reveal, and not in proving

the hypothesis, (e.g. Hightower, 1969:326). They may promote the idea that plotting changes and trends yields the soundest basis for planning the future, (Ghapin, Hightower, 1965). They believe in the primacy of physical, economic and demographic surveys. The empirical survey-analysis-plan concept, initiated by Geddes, is now the stock in trade of the planning office.

Theoretical planners place faith in the deductive approach, working from a general law to a particular case. They seek "to weave together in systematic and logical fashion, a set of propositions about relationships between facts", (Reissmann, 1964:122), these propositions preceding their data collection. They may specialize in a single field or aspect of research, or alternatively may create "a comprehensive body of competent hypotheses which may be derived from a set of postulates implicitly contained in a . . . definition of a city . . . [region or nation]", (Wirth, 1938). Typical planning theorists: Dyckman, Foley, and Webber, (Webber, et al., 1964).

Design Planners are centrally concerned with giving coherence to the built environment. They consider urban design "one of the key instruments . . . to cope with . . . the balancing of development costs and profitability, maintaining the value of private property, excluding unwanted externalities, facilitating social and economic linkages, allocating public resources judiciously . . . ", (Euston, 1981). Their work is "distinguishable from conventional architecture by its public responsibilities", (Waterhouse, 1983). They facilitate "spatial cohesion between newly dependent uses while minimizing disruption to existing ones", (ibid.). Typical Design Planners: Bacon, (1967), Barnett, Burnham, (Wrigley, 1963), Greenberg.

Administrators

Local Planning Administrators are the local level planning directors, consultants, zoning officials, members of planning boards and commissions. Though their calling usually breeds caution and a conventional outlook, they may also be innovators, e.g. Krumholtz, (1982), (Allan) Jacobs, (1978).

Bureaucratic Planners are attached to large influential regional, state, federal agencies, or national planning bodies, e.g. APA, ULI. As such, they may influence the passage of legislation as well as being in charge of its administration. They are "the tamers of the wild men", creating continuity between elected administrations. As the planning "mandarins", they may administer programs of far-reaching planning significance, e.g. Robert Moses, (Wilson, 1983), Baron Haussmann, (Curl, 1964).

Legislating Planners are elected members of councils and legislatures who are professional planners or at least have planning backgrounds. Lloyd Axworthy, and Bob Williams, (Lash, 1976), are Canadian examples; Marcia Kaptur, Douglas Bereuter and Michael Carroll are American examples, (White & Schamberg, 1984).

Entrepreneurial Planners are entrepreneurs who seek to follow the principles of planning as well as make a profit. Examples from the past are Bing, (Birch, 1983), and Wacker and Moody, (Wrigley, 1983); from the present, Rouse (Demarest, 1981), and Zeckendorf. Alternatively they may be planners like Weiming Lu, (Knack, 1984:7), who attract developers and aid them to construct or redevelop, following their professional insights.

Synthesizers

Humanist Strategists include the "humanist-cyberneticists", working toward the productive use and interelationship between technologies, particularly in the fields of communications and computer science, in order to promote the development of the "Liberty Machine", (Beer, 1974). Alternatively, they may focus "on ways to achieve desired changes in organizational structure and behavior", (Friedmann, Hudson, 1974:3) and/or the "strategic" approach to planning, (So, 1984:16-21); thus they are agents of organizational development.

Philosophic Synthesizers actively respond to the problems of social, economic and political turbulence, such as did Geddes "the first to understand the organic interdependence of city and region as the basic . . . structure underlying the complex interaction of place, work and people and of educational, aesthetic and political activities", (Mumford, 1974:443). They are averse to "authoritarian formalism and technocratic planning", (ibid.), and seek instead, to promote "substantial rationality", (Mannheim, 1970), i.e. "intelligent insight into the behavior of complex systems . . . [to discover] the forces underlying (their) . . . dynamic behavior [and] . . . direction", (Friedmann, 1973:30). Examples include Geddes, (1968), Mannheim, (1940), Popper, (1969), Hampden-Turner, (1971), Dunn, (1971), Schon, (1971), and Friedmann, (1973).

Logical Functionalists are the "comprehensive planners" brought up-to-date. Concerned to make decisions more logically, they recognize Man as primarily "a utility maximizing being whose [relationships] . . . are defined in purely instrumental terms", (Friedmann, Hudson, ibid.). To them, rational decision is based on discovering a single, "best" solution. Decision theory states the rules of

logic and practice that lead to such optimal solutions, (ibid.). Planners "are dealing with a complex and probabilistic system in which changes in activities, the spaces which accommodate them or in communications and channels, result in repercussions which modify the system"; (McLoughlin, 1969:92). The approach of the Logical Functionalists "has two distinguishing characteristics: (a) it focuses on the formulation of alternative . . . sequences . . . through which the [planning] system might pass . . .; and (b) it uses new mathematical techniques, particularly computerized models, to aid in formulating the alternatives", (Robinson, 1972:96).

Transdisciplinary Educators believe in the necessity of familiarizing planning students with all modes and styles of professional thought and action. They encourage students to develop all four mental functions: thinking, sensing, intuition and feeling, (Jung, 1964). They promote transdisciplinary thinking and problem-solving, (see Ewing, 1977), preferring "disputation" to debate. Transdisciplinary Educators include Jakobson, (1970), Bolan, (1974), and Blumenfeld, (1967).

APPENDIX E: DISTRIBUTION BY PSYCHOLOGICAL TYPE AND SEX

In describing the Thinker, the Senser, the Feeler, and the Intuitive, Jung makes clear his opinion that there is a dichotomy between the first pair and the last, in terms of the preponderant sex represented. As he states it, Feelers "are almost without exception, women", (Jung, 1976:356), and the Intuitive "would appear more common among women", (ibid.,369). One presumes from this that the male would therefore be more frequently either a Thinker or a Senser.

Jung based himself on impressions gained over twenty years of clinical observation. However, it should be noted that he gives no statistical evidence to support his contention. In any event, it is doubtful that his clients are entirely representative. Again, the score of years he was making his observations belong to the first of this century, whereas we have entered the last. In the interim, we have witnessed an imperfect yet decisive attempt to rectify inequalities of opportunity between the sexes, and a consequent breakdown of conventional stereotypes of male and female roles. Could this have an effect, or are sexual differences in regard to psychological type inherent and incontrovertible ?

A prominent American Jungian, June Singer, seems to think they are not, for she questions whether, if Jung were to observe conditions in North America today, his answers in regard to sexual differences by type would be the same:

> [Jung's] book on types was written in Switzerland long ago, and I wonder if he would have made the same characterizations today, and especially with reference to men and women in the United States. I am convinced that the descriptions of the

> types are valid enough, but I believe that as women become better educated[,] they begin to take advantage of opportunities for highly differentiated thinking . . . .
> (Singer, 1973:193-4).

All this is speculation, however. Singer, like Jung before her, offers no statistical evidence to support her conjectures. Nor did a conscientious search of the library reveal empirical evidence from other sources. Since sexual differentiation regarding psychological type might logically have an effect on recruiting for various types of planning posts, it seemed important to make my own investigation. Using the Jungian "Gray-Wheelwrights Test",[1] 395 responses to the questionnaire were recorded; 202 of them male, the remaining 193, female. The following tables summarize the results.

It should be noted immediately that this is presented as a pilot survey only. The sample is relatively small, and is statistically uncontrolled. Most respondents were interviewed at random directly by me. They are students, co-workers, friends, relatives, acquaintances; a few were interviewed on a bus and during a seminar presentation of this material at a professional conference, (Udy, 1984). The rest were based on interviews by friends of their relatives and friends. The largest part have had at least some university training, and come from a middle class background. Most are between the ages of 18 and 60, though the youngest was a girl of 10, and the oldest, a woman of 92. About 95 percent live in Montreal.

---

[1] A questionnaire developed by Wheelwright, et al., (1964), to test for a person's psychological type.

	Male (%)	Female (%)	Total (%)
Intuitive	22.3	25.9	24.1
Thinking	21.8	11.9	17.0
Sensing	22.8	17.1	20.0
Feeling	9.9	13.5	11.7
Bi-functional	19.9	27.0	23.3
Multi-functional	3.5	4.7	4.1
TOTAL	100.2	99.4	100.1

Table I: **Percentage by Psychological Type**

	Male (%)	Female (%)	Total (%)
Intuitive & Feeling ("Female")	35.2	47.6	41.6
Sensing & Thinking ("Male")	53.5	34.7	44.1
Other	11.5	17.7	14.5
TOTAL	100.2	99.4	100.1

Table II: **Percentage "Male" and "Female" stereotype Characteristics**

	Male (%)	Female (%)	Total (%)
Intuitive & Thinking (Rational)	48.6	42.5	45.7
Sensing & Feeling (Perceptive)	35.2	38.9	37.5
Other	16.4	18.0	16.9
TOTAL	100.2	99.4	100.1

TABLE III: **Percentage Rational, and Perceptive types**

	Male (%)	Female (%)	Total (%)
Intuition	33.3	44.1	38.6
Thinking	38.7	26.5	32.8
Sensing	38.7	35.3	37.0
Feeling	19.9	31.7	27.4
"TOTAL"	130.6	137.6	135.8

TABLE IV: **Percentage, able to communicate or utilize a mental function with ease.**

Analysis of the Tables[2]

The first point to be made from Table I is that a significant number of people, (19.9% males; 27.0% females), do not lean heavily on a single function when looking at the world or dealing with a problem, but might readily use one of two functions; they are therefore bi-functional. Another, smaller group, (3.5% males; 4.7% females), might call-on any of the four; they are multi-functional. Thus, at least one in 5 males (23.4%) and nearly one in 3 females (31.7%), or more than a quarter of the whole sample (27.4%) might not, in the strictest sense of the word, be categorized as any one of Jung's basic psychological types.

Similarly, nearly a quarter of the sample (combined male and female) are Intuitives (24.1), and the split between the sexes is only slightly uneven, (22.3% males; 25.9% females). Looking at male respondents only, we find Intuitives, Thinkers and Sensers very evenly matched, (21.8-22.8% each), with a significantly lower percentage who are Feelers, (9.9%). Slightly more female respondents, (27.0%), are bi-functional, than are Intuitives (25.9%). Interestingly, there are more female Sensers (17.1%) than female Feelers (13.5%) in this sample. Thinkers, though the smallest group, still represent 11.9%, or only 1.6% less than the percentage of female Feelers.

Table II allows us to look at the figures a little differently. As with Jung himself, Intuition and Feeling have traditionally been associated with the female, and Thinking and Sensing with the male. If we pair the types in this way, adding

---

2 This analysis is a revised version of part of a presentation made before the Annual Conference of the American Planning Association in Minneapolis, Minnesota, on 8 May, 1984, entitled Jung and Healthy ? An Exploration of the relationship between Jung's Compass of the Psyche and the Planning Profession, (see pp.13-15).

those bi-functionals who lean equally on both functions of the pair, and leaving aside the rest as "Other", we get some interesting results. Looking at the total sample, (male + female combined), we find the pairs of functions almost equally distributed, (41.6%, 44.1%). When differentiated by sex, Sensers and Thinkers combined still dominate amongsts the males, (53.5%), as do Intuitive and Feelers combined, among the females, (47.6%). However, for both sexes, there is a very significant minority, (35.2% males; 34.1% females), who exhibit mental orientations that, by conventional wisdom, are not associated with their sex. When a third of the human race does not conform, it seems fair to say that the conventional hypothesis is at best a crude approximation, and misleading in a significant number of cases.

Turning our attention to another matter, and to Table III, Jung believed that Thinking and Feeling were both rational processes, while Sensing and Intuition were (sic) "irrational", (by which he meant "supra-rational", or "perceptive"). While accepting, by his definition, he is right about Thinking and Sensing, he appears to be in error regarding the other two. Appendix C provides ample proof that Intuition, though subliminal, is essentially rational, and despite Jung's protestations to the contrary, no legitimate defense stands to make of Feeling a rational process. Accepting then, that Thinking and Intuition can be paired as rational, and Sensing and Feeling as "perceptive", here, again, we find no statistically significant differences between the sexes. On average, about half the human race, whether male or female, respond to rational processes, while more than a third (37.5%) are more "perceptive" in their outlook, (see Table III).

Finally, in Table IV, we leave aside the question of type per se, to look at what Jung's insights can tell us about intercommunication between psychological types. Here, are combined all the "bi-functional" individuals with each of the appropriate types, and the "multi-functionals" with each type. (Hence the totals add up to well over 100%). The percentages in this table are therefore meant to illustrate, not psychological type, but the proportion of those who can reasonably easily understand a particular type and use their functional predilection without undue difficulty. This is, of course, an exaggeration, since no one polled was a pure type, and "secondary" functions (e.g. sensing and intuition for the Thinker) are usually quite accessible. Notwithstanding, confrontations between opposing types are almost inevitable, especially when it is assumed, (as it usually is), that one's own mind-set and world view represents the only legitimate one.

In this regard, it cannot but help if, for instance, the Senser computer expert recognizes his Intuitive boss does not share his enthusiasm for numbers, and couches his results accordingly. Similarly, if the Thinker planning director were to recognize the legitimacy of the Feeler activist planner's concerns---and vice versa---there may be more light than the heat that is usually generated when these opposites meet.

Yet again, if the truth be accepted that a female planner on staff exhibits the classic intellectual abilities associated with either the Thinker or the Senser, (and as the above statistics indicate, there is a fair chance she might), then perhaps she will not have to resort to making the matter a minority rights issue to get the promotion she justly deserves.

In conclusion, assuming (a) the Gray-Wheelwrights test is a reasonably accurate means of assessing a respondent's psychological type, and (b) this pilot study of 395 respondents can be taken as representative of the educated middle class living in eastern Canada at this time, the following general conclusions might be postulated:

(i) The stereotypes of the female Intuitive and Feeler, and the male Thinker and Senser have not proven to be very reliable, since little more than half the male respondents (53.5%) and a little less than half the female respondents (47.6%) obtain to the stereotypes.

(ii) Moreover slightly over a third of the respondents, (35.2% of males, and 34.1% of females), were of a type associated with the stereotype of the opposite sex.

(iii) Bi-functionality represents the characteristics of a significant number of the sample, (23.3%), and particularly of the female respondents, (27.0%).

(iv) This would suggest either that Jung's observations were (a) inaccurate, or (b) affected by the severe bias of his sample, (i.e. his analysands), or (c) true for his time in Switzerland, but not representative of current psychological differentiations in North America, (largely Montreal).